

P  
med  
c

*Conference of State and Provincial  
Boards of Health of North America*

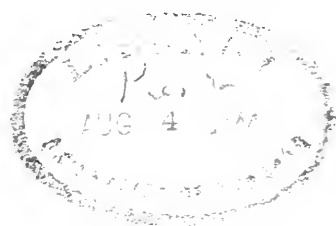
# Proceedings

of the

Conference of State and Provincial  
Boards of Health of North America

1918

35





PROCEEDINGS  
OF THE  
THIRTY-THIRD ANNUAL MEETING  
OF THE  
CONFERENCE OF STATE AND PROVINCIAL  
BOARDS OF HEALTH OF  
NORTH AMERICA

HELD AT  
WASHINGTON, D. C., JUNE 5-6, 1918

---

PUBLISHED THROUGH THE  
AMERICAN PUBLIC HEALTH ASSOCIATION

PRINTED BY  
THE RUMFORD PRESS  
CONCORD, N. H.  
1918





PROCEEDINGS  
OF THE  
THIRTY-THIRD ANNUAL MEETING  
OF THE  
CONFERENCE OF STATE AND PROVINCIAL BOARDS OF  
HEALTH OF NORTH AMERICA

HELD AT  
WASHINGTON, D. C., JUNE 5-9, 1918.

---

*SESSION ON WEDNESDAY  
MORNING.*

*June 5.*

The meeting was called to order by the President, Dr. J. S. B. Pratt of Hawaii, at half past nine.

**THE PRESIDENT:** Through the kindness of the Commissioners of the District of Columbia we have been able to secure this chamber in the District Building for the use of the Conference, and I think we will all agree that it is a very comfortable one. I have asked the Hon. Louis A. Brownlow, President of the Board of Commissioners of the District of Columbia, to say a few words to us this morning and this he has agreed to do.

**MR. BROWNLOW:** I am sure that I am not the man to make a speech to an assemblage of this kind. I am very glad to give you the use of this room which has more attributes of beauty than it has of proper acoustic qualities, but such as it is you are welcome to it and we are glad to have you here.

You know, I think, that we cannot possibly be a really truly member of your body. Dr. Woodward is welcomed as a guest, since under the law we cannot pay the ten dollar fee which would make us a full member. We have a very peculiar government here, and for every item of money down to five cents, it must have been specifically authorized by Congress. Apparently Congress has a jealousy of all other parliaments and it does not like to make appropriations which will permit our officers to attend a convention beyond its control. Whether that is the true reason or only an apparent one, I cannot say. At any rate we are somewhat handicapped in all these things.

We have in the District of Columbia now, largely because of the inelasticity of our means

of finding money for the support of municipal functions, perhaps the most difficult health problem of any city in the country. We have had an increase of population of about ninety or one hundred thousand people in the past twelve months, and at the same time a very great increase in the activities of the people who did live here. We have a much larger population working and living in every way at a very much accelerated rate. To handle all the municipal problems which have arisen we have not had an extra five cent piece of appropriation and we have had a greatly depleted personnel. Take the police department for instance,—it is obvious that when the population is increased 25 per cent you should have more policemen. We have over 150 vacancies on the police force today. We have built many blocks of temporary wooden buildings, but we have no more firemen. There are 40 or more vacancies in the fire department.

In contagious diseases we have had more than 100 per cent. increase over last year, yet we have had less money and fewer men. All along the line we have felt the burden of the war as a municipality very greatly, and in no department more than the health department. I have such explicit confidence in our health officer, Dr. Woodward, however, that I don't bother him. I know that if it possibly can be done, and by any one man with limited means that he can do it. We have trust in him and we let him go ahead. He has been working under tremendous difficulties and if out of this Conference there are any suggestions you can give him that will assist him in his duties, I will be grateful and I know that he will be.

I trust your meetings here in this room will be profitable, as I am sure they will be, and if there is anything we can do to make your stay more comfortable, please command us.

## ROLL-CALL

## BY STATES AND PROVINCES.

Ontario.....	Hon. W. D. McPherson Col. John W. S. McCullough
Alabama.....	Dr. S. W. Welch
Arizona.....	Dr. W. O. Sweek
Arkansas.....	Dr. C. W. Garrison
California.....	Dr. Wilfred H. Kellogg
Colorado.....	Dr. Clinton G. Hickey
Connecticut.....	Dr. John T. Black
Delaware.....	Dr. A. E. Frantz
District of Columbia.....	Dr. W. C. Woodward
Florida.....	Dr. G. H. Gwynne Dr. G. W. Simons
Georgia.....	Dr. T. F. Abercrombie
Hawaii.....	Dr. J. S. B. Pratt
Illinois.....	Dr. C. St. Clair Drake Dr. George T. Palmer
Iowa.....	Dr. Guilford H. Sumner
Kansas.....	Dr. John J. Sippy
Maine.....	Dr. Leverett D. Bristol
Maryland.....	Dr. John S. Fulton
Massachusetts.....	Dr. Eugene R. Kelley Dr. John H. Hitchcock
Michigan.....	Dr. Guy L. Kiefer Dr. Richard M. Olin
Minnesota.....	Dr. H. M. Bracken Dr. C. E. Smith, Jr. Mr. H. A. Whittaker Dr. H. G. Irvine
Mississippi.....	Dr. W. S. Leathers
Montana.....	Dr. W. F. Cogswell
Nevada.....	Dr. Gustav F. Ruediger
New Jersey.....	Mr. D. C. Bowen
New York.....	Dr. Matthias Nicoll, Jr. Dr. A. B. Wadsworth
North Carolina.....	Dr. W. S. Rankin Mr. W. H. Booker
North Dakota.....	Dr. J. W. Cox

Ohio.....	Mr. J. E. Bauman
Oregon.....	Dr. A. C. Seely
Pennsylvania.....	Dr. B. Franklin Royer Dr. Wilmer R. Batt
Rhode Island.....	Dr. Byron U. Richards
South Carolina.....	Dr. James A. Hayne
Tennessee.....	Dr. W. J. Miller
Texas.....	Dr. W. A. Davis Dr. Edward King
Utah.....	Dr. T. B. Beatty
Vermont.....	Dr. Charles F. Dalton
Virginia.....	Dr. E. G. Williams.
Washington.....	Dr. T. D. Tuttle
West Virginia.....	Dr. S. L. Jepson
Wisconsin.....	Dr. C. A. Harper.
U. S. Public Health Service.....	Dr. Allan J. McLaughlin Dr. George W. McCoy Dr. Taliaferro Clark Dr. J. W. Shereschewsky Dr. B. S. Warren Dr. L. L. Lundsen

Guests present were: Miss Mary Beard, R. N.; Dr. A. J. Chesley, American Red Cross; Dr. Rufus I. Cole, Rockefeller Institute; Dr. T. D. Crowder, Director, Department of Sanitation and Surgery, Pullman Company, Chicago; Col. Philip Doane, Director of Sanitation, Federal Shipping Board; Mr. A. W. Hedrich, Editor, *Americian Journal of Public Health*; Mr. Frederick Hoffman, Prudential Insurance Company of America; Dr. Paul Johnson, Interdepartmental Social Hygiene Board; Dr. A. C. Klebs; Mr. J. H. McCully, National Funeral Directors' Association; Mr. H. H. Moore, Chairman, Emergency Committee for Social Hygiene; Major W. A. Sawyer, M. R. C. U. S. A.; Lieut.-Col. Wm. F. Snow, M. R. C., U. S. A.; Mr. C. E. Turner; Mr. Wm. H. Zinnser, Chairman, Sub-Committee for Civilian Coöperation in Combating Venereal Disease, Council of National Defense.

## PROGRAM.

JUNE 5.

President's Address: DR. J. S. B. PRATT

Report of Secretary-Treasurer: DR. EUGENE R. KELLEY

Appointment of Conference Committees—

- (1) Auditing Committee
- (2) Committee on Nominations
- (3) Committee on Resolutions

Roll Call of Provinces and States

Reports of Special Committees, and Special Addresses

- (1) *Report of Committee on Conservation of Vision—*

DR. M. M. SEYMOUR, Chairman, DR. W. F. COGSWELL, DR. J. C. PRICE, DR. JOHN McMULLEN, U.S.P.H.S., Consulting Member

- 2 *Report of Committee on Recent Advances in Sanitary Laws, Organization and Practice*—  
MR. H. A. WHITTAKER, Chairman, DR. J. N. HURTY, DR. E. G. WILLIAMS, DR. CARROLL FOX, U.S.P.H.S., Consulting Member
- (3) *Report of Committee on Courses of Study in Public Health and Sanitary Matters*—  
DR. S. J. CRUMBINE, Chairman, DR. OSCAR DOWLING, DR. A. J. YOUNG, DR. FREDERICK R. GREEN, and MRS. W. A. JOHNSON, Consulting Members
- (4) *Report of Committee on Sanitary Policy under War Conditions*—  
DR. JAMES A. HAYNE, Chairman, DR. HERMANN M. BIGGS, DR. B. F. ROYER, DR. JOHN S. FULTON, DR. C. ST. CLAIR DRAKE, DR. A. J. McLAUGHLIN, U.S.P.H.S., Consulting Member
- (5) *Report of Committee on Pellagra*—  
DR. JAMES A. HAYNE, Chairman, DR. H. F. HARRIS, DR. JOSEPH GOLDBERGER, U.S.P.H.S., Consulting Member
- (6) *Report of Committee on Terminal Disinfection*—  
DR. CHARLES F. DALTON, Chairman, DR. J. N. HURTY, DR. W. F. LIPPITT, DR. G. W. MCCOY, U.S.P.H.S., Consulting Member
- (7) *Report of Committee on Change in Name of Conference*—  
DR. W. S. RANKIN, Chairman, DR. J. N. HURTY, DR. M. M. SEYMOUR
- (8) *Address. "The Diagnosis of Cerebro-spinal Meningitis"*  
DR. MATHIAS NICOLL, JR., Deputy Commissioner, New York State Department of Health
- Pneumonia Problem
- (9) *Address. "Pneumonia in the Army"*  
DR. RUFUS I. COLE, Rockefeller Institute
- (10) *Report of Committee on Pneumonia*—  
DR. JOHN S. HITCHCOCK, Chairman, DR. B. F. ROYER, DR. A. B. WADSWORTH, DR. RUFUS I. COLE, Advisory Member
- War Tuberculosis Problem
- (11) *Report of Committee on Tuberculosis Policy*—  
DR. H. M. BRACKEN, Chairman, DR. J. T. BLACK, DR. A. T. McCORMACK, DR. F. C. SMITH, U.S.P.H.S., Consulting Member
- Discussion opened by Dr. Arnold C. Klebs  
(Dr. James A. Miller of the Commission for the Prevention of Tuberculosis in France, of the Rockefeller Institute, will give a stereopticon address on "Health Conditions in France at Present," on Tuesday, evening June 4, in conjunction with the Surgeon General's Conference)
- JUNE 6.
- (12) *Report of Committee on Progress of Full Time District Health Officer Legislation*—  
DR. C. ST. CLAIR DRAKE, Chairman, DR. J. T. BLACK, DR. J. S. FULTON, DR. E. R. KENNEDY, DR. W. S. LEATHERS, DR. H. E. YOUNG
- (13) *Extension of Federal Assistance in Rural Sanitation to the Several States*—  
DR. W. S. RANKIN, Chairman, DR. S. J. CRUMBINE, DR. W. F. COGSWELL
- (14) *Activities in Public Health Matters by Federal Departments other than the United States Public Health Service*—  
DR. J. CRUMBINE, Chairman, DR. T. D. TUTTLE, DR. W. S. LEATHERS, DR. J. W. KERR, U.S.P.H.S., Consulting Member
- Child Conservation.
- (15) *Address: "Activities of the American-Red Cross for Child Conservation"*  
DR. TALEMIRRO CLARK, U.S.P.H.S., Director, Bureau of Sanitary Service, American Red Cross
- (16) *Address: "The Work of the Massachusetts State Department of Health and of the Women's Committee of the Council of National Defense on Child Conservation"*  
MISS MARY BEARD, R.N., Member, Massachusetts Child Conservation Committee

- (17) Address: "Child Conservation in Illinois"

DR. C. ST. CLAIR DRAKE, Director, Department of Public Health, Illinois

- (18) Address: "Child Conservation in Pennsylvania"

DR. B. F. ROYER, Acting Commissioner of Health, Pennsylvania

- (19) Address: "Child Conservation in New Jersey"

DR. J. C. PRICE OF MR. R. B. FITZRANDOLPH, New Jersey Department of Health

#### Venereal Diseases

- (20) Address: "Program of War Department against Venereal Diseases"

W. F. SNOW, M.D., Major, Medical Reserve Corps, and W. A. SAWYER, M.D., Major, Medical Reserve Corps.

- (21) Address: "Program of the United States Public Health Service against Venereal Diseases"

DR. A. J. McLAUGHLIN, Assistant Surgeon General, U.S.P.H.S.

- (22) Address: Description of the Practical Organization and Carrying Out of an Efficient State Department of Health Program against Venereal Diseases"

DR. H. G. IRVINE, Minnesota State Board of Health

#### *Report of Committees—*

- (1) Auditing Committee

- (2) Committee on Nominations

- (3) Committee on Resolutions

- (4) Committee on Publicity

DR. W. C. WOODWARD, Chairman

DR. J. N. HURTY

DR. J. A. HAYNE

#### Election of Officers

#### Installing Incoming President

#### Adjournment

### ADDRESS OF THE PRESIDENT.

After a thirteen months interval we are assembled together again for our Annual Conference. During this interval many important events have occurred but we are not called upon to reflect or deal with the things that are past, for it is more important and our duty to prepare for the future. "To look forward and upward. To lend a hand." There have, without doubt, been numerous disappointments come to each of us during the past year but it is to be hoped that out of these disappointments has come something which has spurred us on to still greater efforts for the cause and objects we are all fighting for.

The program which is presented to you this year, it is believed, is a most constructive one and the important problems should receive your most careful consideration for upon the wise and efficient solution of

them rests to a large extent the future welfare and health of our beloved country. Venereal diseases, tuberculosis, conservation of infant and child life, and the training and caring for our maimed and crippled soldiers, these are large problems and we should deal with them in a large and broad way so that the life and health of the nation may be conserved. There are many forces at work at the present time endeavoring to solve these important and vital problems, but the question is has there been efficient coöperation and coördination of all these forces? Has there been good team work? During the past year we have heard a great deal about this thing and that thing winning the war, but after all you have to finally come back to the one great fundamental fact that without health the war cannot be won. Our army must be healthy if

the world is to be made "safe for democracy" and the people who are back of the army and navy must be healthy otherwise the army and navy cannot be supported. It is estimated that in order to keep one man on the firing line it takes from fifteen to twenty-five people at home. If these people at home are not healthy they will not be able to do effective work and our fighting force will be reduced. Then again we must keep in mind that the children of today will become the American citizens of the future and upon their shoulders will fall the burdens and trying problems of reorganization. Let us adopt the measures necessary to enable them to grow up strong and healthy and well fitted for the tasks which await them.

The ground has been well prepared, let us plant the seeds and attend to the cultivation in order that a full and plentiful harvest may be forthcoming. This war has awakened the people as never before and the public press has been a mighty and powerful aid in moulding public opinion. Let me give you an example by quoting an extract from the *Chicago Herald*: "Health, ultimately, will be an assured possession of the human race. It will be a governmental obligation. Never more will governments be permitted to allow millions of people to live half lives handicapped by preventable diseases, condemned to senseless inefficiency. At no distant date, from the moment the babe is born, nay in the long months before birth, care will be given the mother and the child. Science will be put at the disposal of all. Diseases will be prevented before they have occurred. The same care which now surrounds armies in the field will be extended to the entire nation. But the care for health will not be limited to negative measures. Work will be ordered, recreation will be interspersed, living will be so planned that the largest number of people possible will enjoy the exultant pleasures of being thor-

oughly alive and vigorous. Health is an object of the coming state."

Thus far we have been dealing mostly with the destructive side or what we might term our liabilities, so let us for a few moments touch upon some of the public assets of the war. For there is always the silver lining to the darkest cloud.

*First* might be mentioned the great awakening of the public to the importance of hygiene and sanitation.

*Second.* Many of the personnel of the different state, county and municipal health organizations have joined the colors and these without doubt will by their example of right living have an influence on those with whom they come in contact.

*Third.* Large numbers of men, probably thousands, will have had training during the war in military hygiene, they will have been trained in a school that has but a single consideration—efficiency—and these men can easily be trained to make efficient state, county or municipal health officials. There will no longer be a dearth of administrative or technical workers.

*Fourth.* Then there will be the millions of men from the fighting army who are learning as never before the value of hygiene and sanitation. These men will not be content to go back to an environment in which relatively little attention is paid to health and sanitation. These men will carry home a lesson which in a way will be a demand that the great advances in preventive medicine and sanitation shall be more generally available.

*Fifth.* Then we have the great progress that has been made in social hygiene, a progress greater during the past year than has been made in a generation. The war is forcing nations to put social diseases in the group with other preventable diseases.

*Sixth.* The work of the Public Health Service in conjunction with the state and local health authorities in the zones around military camps and cantonments has given

complete evidence of what can be accomplished in civil communities if men and money are available.

*Seventh.* The war will also give a new impetus to the reporting of births. The time will soon come when the physician who does not report a birth he has attended will be looked upon as not better than a thief for he has stolen away the child's birth right.

*Eighth.* We have an economic as well as the social side. The prevailing high wages may fall a little but should not and probably will not go back to the level at which millions were working for before the war. While burdens in the way of taxation will be heavy for many years to come they will fall chiefly on those best able to carry the burden. And in this connection it is believed that the health officer and sanitarian will in the future receive a compensation more commensurate with the large responsibilities he is called upon to carry. It will be the full time health officer again. The term "Sanitary Wage," coined I believe by Surgeon General Gorgas, in order to describe the wages which enabled men to have a reasonable number of the good things of life in addition to the absolute necessities should prevail in the future.

*Ninth.* There can be no question but what public health activities have received an impetus that will carry them further than they would have gone in several generations under conditions of peace.

Each one present I am sure feels the great responsibility he is placed under and will I feel certain give of the best that is in him. Bear in mind that we have even a greater opportunity than we had last year to do good for our fellow men. To a great extent we have the making or breaking of future generations in our hands. Let us do our utmost to make this Thirty-third Annual Conference a monument to make the path of progress in hygiene and sani-

tation so as to reflect credit not only on the states, territories and provinces we represent but make it also so that the effect may have its influence upon a much larger area than our beloved North America.

## REPORT OF THE SECRETARY-TREASURER.

DR. E. R. KELLEY.

Following the authorization given at the last Conference, the Secretary arranged for several of the addresses and reports of most general interest to be published in the *American Journal of Public Health*, which insured a much wider circulation than would have been possible through the PROCEEDINGS alone.

This plan of having certain requests and reports appear in the *Journal* is advantageous in many ways, but has several drawbacks. I should like your opinion as to whether this plan should be followed during the coming year. You will remember that the PROCEEDINGS as printed by the Rumford Press, the printers for the *American Journal of Public Health*, has a two column page with rather small margins. This, of course, does not look as well as a single column sheet with larger margins, but will have to be put up with if we vote this year to continue printing special addresses in the monthly issues of the *Journal*. It would not be practical to have the papers printed in the *Journal* and then send the manuscript to still another printer for the PROCEEDINGS.

Five hundred extra copies of the PROCEEDINGS were ordered this year in order to fill the increasing number of requests which have been received from libraries and institutions desiring complete files of the PROCEEDINGS. In line with the policy of previous years, surplus copies have been turned over to the library of the Public Health Service.

Special effort has been made this year

by your Secretary to secure a complete attendance. In addition to letters sent to the members urging them to attend, letters were also sent to each governor of the states and to the lieutenant-governors of the provinces urging them to see that their health departments were represented at the Conference this year.

We have lost a number of our members during the past year, most of whom have entered the service. This has necessitated changes in the personnel of many committees, and it has sometimes been difficult for members of committees to confer because of the frequency with which changes have occurred.

After conference with the Executive Committee it was decided that particular attention should be paid to the following subjects which have been brought more to the front than ever before because of

the war, that is, pneumonia, tuberculosis, child conservation and venereal diseases. In order to provide for a well-rounded presentation of these subjects it has seemed advisable to invite a number of outside speakers for the program this year. As a result we have a rather full program, but it is believed that it will be possible to finish the program in the two days allotted to the Conference.

The following states and provinces are in arrears for their current dues: Manitoba, New Brunswick, Alabama, Alaska, Arizona, Arkansas, Colorado, Idaho, Montana, Nevada, Nebraska, North Dakota, Oregon, Pennsylvania, Porto Rico, Tennessee, Washington, Wyoming.

May I urge all the representatives of these states and territories who may be present to give this matter of dues their immediate attention upon their return home.

STATEMENT OF DR. E. R. KELLEY, TREASURER,  
CONFERENCE OF STATE AND PROVINCIAL BOARDS OF HEALTH.

ASSETS

Balance on hand May 1, 1917.....	\$443.96	
Assessments collected May 1 to Dec. 31, 1917.....	90.00	\$533.96
(Ten cents deducted on check by bank).....		.10
		<u>\$533.86</u>

1917

DISBURSEMENTS

May 7 To printing programs, Ranger Company.....	\$7.35	
May 24 To Miss Frances McCloskey, railroad and hotel expenses and reporting.....	62.30	
June 16 To printing 1,000 letterheads, Ranger Company.....	5.39	
June 21 To Miss Frances McCloskey, work on transactions.....	38.50	
July 18 To Miss Frances McCloskey, typewriting circular letter.....	5.00	
July 19 To Miss Amy Churchill		
225 stamped envelopes	\$4.95	
Multigraphing two-page circular letter	5.75	10.70
		<u>129.24</u>

Balance on hand Jan. 1, 1918.....	\$404.62
Assessments collected January 1 to May 31, 1918.....	390.00
	<u>\$794.62</u>
Deducted by bank, on four Canadian checks, 20 cents each.....	.80
	<u>\$793.82</u>



1918

Jan. 10	To Miss S. E. LeMaster, expressage on PROCEEDINGS.....	\$1.65	
Jan. 17	To Miss S. E. LeMaster, expressage on PROCEEDINGS.....	1.32	
Jan. 17	To Miss A. M. Ethier, for postage.....	10.00	
Jan. 18	To Miss S. E. LeMaster, for postage.....	16.00	
Jan. 21	To Fred N. Macaulay, multigraphing circular letter.....	2.00	
Feb. 2	To the Rumford Press, for printing transactions.....	269.37	
Feb. 8	To Miss S. E. LeMaster, for postage.....	6.00	
Apr. 16	To John J. Hill, printing 1,000 letterheads.....	4.25	\$310.59

Balance on hand May, 1918..... \$483.23

THE PRESIDENT: Before taking up the next order of business I wish to say I have noticed at several conventions which I have attended that the presiding officer, in order to bring the meeting to order, either raps on the table with his knuckles or pounds the desk, and it seems to me fitting that we should have a little more dignity in this matter and so I had prepared out of a Hawaiian wood called "koa," a gavel which I desire to present to the Conference, to be used by each presiding officer during his term of office.

DR. KELLEY, *Secretary*: I think it only fitting on behalf of the members of the Conference to express to you something of our surprise and gratitude at this most handsome gavel. I don't know whether the members of the Conference have noticed that it is not only beautifully made, but it also bears a very handsome inscription in silver. I take pleasure in handing it back to you, Mr. President, for use at this Conference.

#### CHAMBERLAIN-KAHN BILL

THE SECRETARY: I will call the attention of the Conference to the fact that we have set a certain order for the discussion of the Kahn-Chamberlain bill, and by request the members of the Conference will try to get in touch with the members of the Committee on Military Affairs of the Senate and House and ask them to meet with us for a discussion of this all-important venereal disease bill which carries with it a total appropriation of \$3,000,000 for the extension of venereal disease work in the several states. We ought to be able to get at least half a dozen of the members of the Committee here, and it was felt by those responsible for the draft of the bill, the representatives of the Army Medical Department, the Public Health

Service, and the Council of National Defense, and American Society for Social Hygiene, that if we could only get a fair representation of this Military Affairs Committee, so that we could discuss the matter with them, it would materially assist in the passage of this legislation.

DR. HAYNE: It seems to me that a motion is necessary in this body in order to make this a special order of business. No motion has been before the body to that effect so far as I know. I would move as a substitute for that plan, in case such motion is made, that it would be a much more dignified proceeding for this body to appoint a committee to ask for a hearing before the Military Affairs Committee.

DR. WELCH, *Alabama*. I saw the Chairman of the House Committee and he didn't even know that the bill had been introduced, but he had it brought to him and looked it over while I was there. He frankly said he could not be present at the meeting tomorrow. Two other Congressmen from Alabama said the same thing. I think the position of Dr. Hayne is well taken.

THE PRESIDENT: Do you know if that Committee will meet tomorrow?

THE SECRETARY: Assistant Surgeon General Warren told me there was no meeting of the Military Affairs Committee in the morning. But I think some of the gentlemen from the Committee would rather come down here and meet with us and hear the bill discussed.

DR. HAYNE, *South Carolina*. In order to make my point clear let me say that this is the Conference of State and Provincial Boards of Health. No other conference can pass resolutions in advance of its meeting for it. If a motion is made here I will vote for it, but I will not vote for a motion that has not been made.

DR. BRACKEN, *Minnesota*. I think it quite in

order to invite the members of this Committee to meet with us. I think it also in order that we should appoint a committee to ask for a hearing before this Committee, but our committee cannot meet with that Committee before we adjourn. I move you that an invitation be extended to the members of the House and Senate Committees on Military Affairs to meet with this Conference tomorrow morning at half past ten.

Dr. Bracken's motion was seconded.

DR. NICOLL, *New York*: I don't know anything about national legislation but I know something about state legislation, and I don't believe that that is a workable proposition. I think a committee should be appointed from this body to be placed at the disposal of certain members of the Military Affairs Committee to present the facts in this matter. That is the only way to get coöperation. You might get one or two representatives from the Military Affairs Committee here, but that would be all.

DR. BRACKEN, *Minnesota*. I feel that my motion is all right. We don't expect all the members of the Committee to come. Of course we want to appoint a committee to get in touch with the Military Affairs Committee, but in the meantime we do no harm in inviting the Committee to come here. If someone comes, we are so much ahead.

Dr. Bracken's motion was put to a vote and carried. (See also page 102.)

#### APPOINTMENT OF COMMITTEES

The following committees were appointed by the President:

*Auditing Committee*.—Dr. John T. Black, Chairman, Dr. S. W. Welch, Dr. W. F. Cogswell.

*Committee on Resolutions*.—Dr. C. St. Clair Drake, Chairman, Dr. C. A. Harper, Dr. S. J. Jepson.

*Committee on Nominations*.—Dr. T. D. Tuttle, Chairman, Dr. W. S. Leathers, Dr. C. F. Dalton.

It was voted that the five-minute rule for discussions be adhered to, and that no speaker be permitted more than one speech until everyone desiring to be heard has had an opportunity to express himself.

THE SECRETARY: I have just received a letter from Dr. M. M. Seymour, Commissioner

of Public Health of Saskatchewan, expressing his regret at being unable to be present at the Conference this year. Dr. Seymour has presented a report as Chairman of the Committee on the Conservation of Vision. Dr. Cogswell of Montana, the next ranking member of the Committee, has requested that I read the report since he is not familiar with it and I have had an opportunity to look it over.

#### REPORT OF COMMITTEE ON CONSERVATION OF VISION.

PRESENTED BY M. M. SEYMOUR, M. D.,  
D. P. H., *Commissioner of Public Health of the Province of Saskatchewan, Chairman.*

As former reports, presented by your committee, have dealt fully with diseases and defects of the eye and the attitude of boards of health towards this question, the present report is necessarily brief and somewhat general in character.

In most of the states and provinces regulations have been made, or are about to be made by boards of health, dealing with ophthalmia neonatorum and trachoma, which are recognized as causing a large percentage of the blindness existing in the country.

With regard to ophthalmia neonatorum and its prevention, the provisions made by different boards of health vary; in certain states and provinces a prophylactic agent is supplied free to physicians and midwives, and its use is compulsory in the eyes of all newly born; in others, the prophylactic is supplied but its use is not insisted upon but merely advised as a routine preventive measure.

Inquiry made in twenty-eight states and provinces shows that regulations require the use of a prophylactic in twelve cases and in sixteen cases do not, but a few of the latter provide a prophylactic free and advise its use.

A more general use of this simple preventive measure would have a very great

influence in reducing the number of cases of ophthalmia neonatorum, and the education of the public to the realization of the need for this protective practice would assist greatly.

Reports received by your committee show that trachoma is very prevalent in certain districts and where there are Indian reservations it is particularly so, and in some instances, in spite of the fact that the Indian Department is interesting itself by periodically sending a trachoma expert to investigate, there is good reason to believe that the disease is being spread to white settlers, in the surrounding counties, and through the schools. Here general medical inspection of all school children and families in which the disease is found to exist and the establishment of trachoma hospitals in districts where the disease is prevalent, in order that treatment may be easily obtainable, seem to be the first steps towards a solution of the problem. The United States Public Health Service has established and maintains six trachoma hospitals in the Appalachian Mountains, where trachoma, looked upon and treated as a surgical disease, has been found to be curable in the majority of cases in a reasonable time, and in all cases in time, if given proper care and treatment.

Unfortunately the difficulties in securing early treatment are increased by the fact that many cases of trachoma are missed by the general practitioner and even when discovered are not reported to boards of health as fully as the law requires.

In a recent report of the chairman of the Committee on Conservation of Vision of the Council on Health and Public Instruction, American Medical Association, among many splendid results of its activities the following is particularly to be recommended:

"A recently enacted law in Kentucky compels the state board of health to conduct schools in each county, on which attendance is made compulsory, for the

instruction of physicians and midwives, concerning the prevention of blindness, with particular reference to trachoma and ophthalmia neonatorum."

In Canada the disease is not known to exist to any great extent; in the Province of Nova Scotia only one case has been known in the native population during the past four years. In some provinces, boards of health are aware of a few scattered cases among the foreign settlements and in others the extent of the disease is not known. In Saskatchewan and Alberta the disease has been found to be very prevalent in certain of the foreign settlements, but fortunately it has been kept under control and has not spread to any extent outside of these districts. In Saskatchewan, the Provincial Bureau of Public Health has made every effort to keep the disease confined to these districts and a special medical officer has been detailed to give all his time to this work, living in the affected district and providing treatment for all cases both at a central office and by house to house visitation. The schools in the districts are inspected regularly and where trachoma is found in any pupil, it is generally found to exist in the home, some other member or members of the household being the source of infection, and thus cases are discovered and treatment applied. Treatment of school children is readily accomplished but with parents, it is more difficult to induce them to undergo the necessary measures for relief, as they have become indifferent in the majority of cases and only by persistent efforts on the part of the medical officer can anything be accomplished. Treatment must be taken to these people as they will not make any effort to avail themselves of it otherwise.

From inquiry made in twenty-eight states and provinces it was found by your committee that in nineteen of these the common towel was prohibited by law, and in nine it was not. On the whole there is

a general improvement in the rural districts with regard to this source of spreading infection and the public are beginning to learn the danger attached to the use of common articles.

With regard to the military aspect of defective vision, your committee has been unable to secure any definite statistics but the original regulations governing the draft boards in the United States army have been modified and now men whose vision is 20/100 are accepted for general military service and 20/200 for selective military service. Even lower visions are accepted, if in the opinion of the examining physician, it can be brought up to this standard by treatment. This would go to prove that the average vision is not as good as was expected when the standards were first set. Draft regulations have also recently been altered with regard to trachoma which was formerly a cause for exemption. Men suffering from trachoma are now not exempted and strong recommendations have been made for the establishment of a permanent trachoma camp where they might be treated. The drafting of so many men undoubtedly is a great opportunity for checking this disease and if all those suffering from it can at least be tentatively accepted for service and treatment enforced, much will be accomplished, as these cases, when rejected return to the civilian population and by infecting others, render them also unfit for military service.

The following report on "Trachoma and the Army" is submitted by Dr. John McMullen of the United States Public Health Service, advisory member of the committee.

"Now that our country is engaged in raising a great army, it is our duty to prevent the admission to the army of recruits who may spread disease.

"The history of European wars shows that trachoma has been a grave menace to the efficiency of the fighting forces, invaliding thousands of men and blinding large

numbers of its victims. So great has been the prevalence in the armies that trachoma was at one time termed 'military ophthalmia' and believed to be confined to soldiers. Various articles of their equipment were condemned as being the cause of the disease.

"Trachoma has been said to be 'as old as the Nile, the simoom, and the desert.' It has an historical importance as an epidemic disease of both military and civil life and has made fearful ravages in practically every European country.

"Despite the confusing and contradictory statements in connection with trachoma, the contagious character of this disease is unquestionable.

"During the first half of the nineteenth century one soldier in every five of the Belgian army is said to have suffered from trachoma. It is alleged that upon the recommendation of a noted authority at that time, the trachomatous soldiers were discharged from the army to their homes. This procedure cleared the army of trachoma at that particular time, but carried the disease directly to the homes and the civilian population, where it previously did not exist. This removed all doubt as to the contagiousness of trachoma, which at that time was denied by some, and subsequent cases in the army were isolated in special hospitals, which caused a diminution in the disease.

"It is stated that in some countries there were frightful epidemics of trachoma, and that the English, Prussian, Russian, and other armies suffered from the ravages of this disease.

"During the Russo-Japanese War trachoma was a formidable enemy to be reckoned with in the Japanese army and large numbers of troops were isolated and treated for this malady.

"Some months since it was reported that an epidemic of trachoma was causing considerable anxiety in France, the disease having been brought to that country by

African soldiers and laborers. In the army the disease was checked by the quick isolation of all victims, and other drastic measures. Among the civilian population, however, the epidemic was still spreading, especially in the larger cities, and the health authorities were taking every precaution. All persons whose eyes showed any inflammation were examined by specialists and isolated if suspicious.

"Statistics from the medical inspection of aliens at United States ports indicate that trachoma is found most extensively among the Syrian, Armenian, Hebrew, Italian, Polish, and Greek races. Trachoma, however, extends more or less over the whole world and exists in many places in the United States as an endemic disease. Lasting as it does for years, it is a constant irritation and discomfort to the patient, impairing his earning capacity and efficiency as a workman and soldier, ruining the life and happiness of entire families and finally terminating in many instances in total blindness. After nearly a lifetime of misery the patient is often seen dwarfed in mind and warped in body with the trichiasis, entropion, and other sequelae still remaining to harass and irritate the now sightless eyes.

"Several years ago the Public Health Service instituted an investigation into the prevalence of trachoma in the United States. Investigations were made among the Indians, and the residents of the Appalachian Mountain range and other sections of the country. The Indians were found to be almost universally infected and on some reservations 90 per cent had trachoma. This survey showed that the disease exists more or less throughout 'Appalachian America' and, in some portions the infection was found to be as high as 10 to 12 per cent of the population and in some communities even a higher rate of infection was found. In sections of Minnesota trachoma was found. The disease is also reported

from Ohio, Indiana, Kansas, and other states. In fact, it is found to be widely distributed in our country. It is not an uncommon thing to see in one family several generations with trachoma. So prevalent and widespread is the infection in some sections of the United States that the Public Health Service has established and maintains in those sections six ophthalmic hospitals for the treatment of trachoma, which is classed by the Government as a dangerous contagious disease.

"These hospitals have now been in operation for several years and, during the past year, a total of 19,530 patients were treated; 1,880 patients were admitted to the hospitals and 1,687 operations were performed. Of this number, 1,153 were under local and 534 under general anesthesia. The records show that at least one-half of our trachoma patients have impairment of vision, ranging all the way from slight defects to total blindness. Ulcer and corneal opacity occur in 25 per cent of the cases; pannus is present in 20 per cent; and photophobia was recorded in 33 $\frac{1}{3}$  per cent; entropion and trichiasis in 10 to 15 per cent of the cases. Entire families are found suffering from trachoma, including both extremes of life.

"The diagnosis of trachoma is still based on clinical evidence, since the causal organism is as yet unknown. Diagnosis, therefore, is in many cases difficult. There are many cases which are found only by careful examination as, but few, if any symptoms, may be present at the time of examination and the condition may be said to be latent or dormant. Sooner or later, however, by reason of a foreign body or other excitant, there arises a condition analogous to acute granulations with the watery secretion so characteristic of the disease and the other familiar symptoms. In this stage the disease is highly infectious.

"Trachoma is transmitted from the sick to the well by the secretion which is conveyed to the healthy eye by means of such

infected articles as towels, handkerchiefs, bed linen, etc.

"Armies originally get trachoma from the infected civil population in the areas from which recruits are accepted, and give it back to the people, often with interest, when men are discharged who have served their enlistment or become incapacitated.

"Trachoma is essentially a chronic disease, and untreated lasts ordinarily the better part of a lifetime. It is a surgical affection and, if anything like satisfactory or permanent results are to be obtained, it must be by properly and skillfully conducted surgical proceedings, and, in many cases, hospital care.

"With the proper surgical procedure followed by the after care and treatment, any case of trachoma can be cured, the length of time required to effect a cure depending upon its duration, severity, and other factors. In children, when seen early, the disease is usually readily eradicated and they can return to school in a short time. While occasionally cases of trachoma continue for years with but comparatively small damage to the cornea, others produce corneal complications early and persistently and the eye is lost in a short time.

"The results that are being obtained in the six Public Health Service trachoma hospitals are exceedingly satisfactory. During the past fiscal year about 1,500 cures have been effected. Adults who have suffered from trachoma for years and were dependent upon their friends or the county for support, some being inmates of the poorhouse, have been relieved, are no longer foci of infection, have taken their places in the community, and are earning a livelihood for themselves and family. Children unable to attend school because of the constant physical suffering and impaired vision are now securing the education which would have been impossible but for timely interference.

"There is no lack of evidence that we have a great deal of trachoma in this country, and that it is a public health problem to be dealt with before the disease establishes foci everywhere.

"As previously stated, trachoma often exists in a latent or dormant stage, and there is grave danger that recruits may be enlisted suffering with this disease unless the greatest care is exercised.

"The eyelids of all soldiers and applicants for enlistment should in every instance be everted, the examination to include the retrotarsal fold, and the condition of the membranes noted in a space on the blank form reserved for this purpose. If the eyelids are not smooth and pink, if there is any redness or secretion, especially in the retrotarsal fold, such cases should be segregated for examination by those trained in the diagnosis of trachoma. An applicant who is found to be suffering with a well-marked trachoma, should not be immediately rejected, but should be given treatment and his trachoma cured. He can then be again examined to determine whether he has resulting visual defects sufficient to cause his rejection. In this way a case of contagious disease will be eliminated and probably a good soldier gained.

"Any case of trachoma or suspected trachoma detected among soldiers or sailors should be immediately isolated under care and treatment until cured or until the suspected diagnosis is found to be in error."

With reference to the question of defective vision in school children your committee would recommend a more universal adoption of medical inspection in schools. Statistics show that less than half the children attending city schools could pass a test giving perfect vision in both eyes and that fully 20 per cent have eye trouble requiring treatment by an ophthalmic surgeon. Many of these defects are acquired in schools, where desks and seats are im-

properly adjusted and lighting is not sufficiently considered. While the school nurse is capable of accomplishing a very valuable work, it is strongly to be recommended that a physician be appointed to examine children when first they enter school and at least every six months thereafter, and that the school nurse should follow up cases and see that the instructions of the physician are thoroughly carried out.

Another important factor in considering the conservation of vision is the present campaign against venereal diseases. Recent work shows that a considerable number of cases of inflammatory conditions of the eye are due to gonorrhoeal infection. Statistics published by different investigators vary, but it may be generally accepted that many patients, who suffer from recurring iritis without any apparent outside infection, are being reinfected from urethritis and other results of a chronic gonorrhoea.

Statistics with regard to ophthalmic cases show that in numerous cases of interstitial keratitis and other inflammatory conditions a positive Wassermann reaction can be obtained.

Your committee recommends the adoption of the following measures for conserving vision as far as possible:

1. The compulsory use of a prophylactic agent in the eyes of all newly born and its supply, free of charge, to physicians and registered midwives, by State and Provincial Boards of Health.

2. The general adoption of a system of medical inspection of school children by a physician, and follow up work by a school nurse.

3. The compulsory treatment of trachoma cases, and the establishment of hospitals or other suitable places, where treatment may be obtained.

4. The prosecution of the campaign against venereal diseases and the enforced treatment of patients until a cure is effected.

## SUPPLEMENTARY INFORMATION

In a total of forty-four states answering a questionnaire twenty-nine have either a law or regulation prohibiting the use of the common towel and sixteen have either a law or regulation requiring the use of prophylaxis in the eyes of the newly born.

In January, 1917, trachoma was notifiable in only thirty-two states. It has been impossible to obtain, up to date, the number of states in which this disease is notifiable, but owing to its dangerous and communicable nature, it should unquestionably be a reportable disease in every state of the Union.

In January, 1917, trachoma was notifiable in the following states:

Alabama, Alaska, Arkansas, California, Colorado, Delaware, Hawaii, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, Ohio, Pennsylvania, Porto Rico, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin.

Trachoma has been notifiable in Connecticut since March 1, 1918.

It was voted that the report of the Committee be accepted and placed on file.

It was also voted that the privileges of the floor be extended to the guests of the Conference.

## DISCUSSION.

THE SECRETARY: Dr. McMullen, would you care to say a few words?

DR. McMULLEN, U. S. P. H. S.: I don't know as I have anything more to add to Dr. Seymour's report. I completed a questionnaire of all the states of the Union in regard to two things: first, asking whether or not the roller towel was controlled either by law or regulation; and second, whether there was a state law or regulation which required the use of silver nitrate or other methods for the protection of the eyes of new-born infants. My secretary forgot to include that table in my papers and I am sorry

I cannot give you the exact figures, but the greater majority of the states had laws governing the roller towel. It seemed to be quite a general thing, at least 75 per cent of the states having such statutes or regulations.

In regard to the protection of the eyes of the new-born, comparatively few, compared with the number having roller towel regulation, had such legislation. I should say about 50 per cent.

With regard to the prevention of eye accidents, a great deal has been done in industrial centers along this line with a resultant increase in the conservation of vision. I hope that the routine practice of dropping silver nitrate into the eyes of the new-born will be either a law or regulation or both in all of the states at an early date.

The question of wood alcohol has also been taken up, and I believe the state of Kentucky has passed a law in regard to that. Most of the states have passed such laws and are now interested in prohibiting the sale of wood alcohol.

DR. KELLOGG, *California*. I just want to say as a matter of record how much can be done in the matter of encouraging the use of silver nitrate in the eyes of babies without a law requiring that to be done. California distributes free of charge the outfits and even has printed on the birth certificates an inquiry to be filled out as to whether or not the prophylactic has been used and stating that it can be secured free of charge. The birth certificates show that the prophylactic is being used without any law requiring its use to be passed in over 90 per cent of the births occurring in the State. This has been going on for only about two years, so that it shows that a great deal can be accomplished in this way.

DR. HARPER, *Wisconsin*. I just want to add to that the fact that in Wisconsin this has been a statutory requirement for four years. We have an annual appropriation of \$1500 and distribute the silver nitrate. This is sufficient to furnish prophylactic to treat the eyes of all the babies born in the state of Wisconsin, about 60,000 a year. A survey was made of the state institutions for the blind some time ago and it was found from 17 to 23 per cent of the blind or partially blind inmates became that way through infection at birth.

In the four years that this law has been in effect we have had but very few cases of serious eye trouble. The last year I think we had only

three, and so far as we are able to learn, there has been but one eye lost from this infection since the law went into effect and has been stringently enforced. Fortunately perhaps, two medical men failed to use nitrate solution when this law first went into effect and the public became aware of the situation. The parents prosecuted these men for neglect of duty, and a rather severe fine was imposed upon them. This received general publicity and I think we can say that there are no children taken care of by physicians or midwives in the state but that the nitrate is used. Perhaps a few in the rural districts may escape, but the fact I want to emphasize is that for \$1500 a year we are able to protect and safeguard the eyes of every new-born child.

DR. FRANTZ, *Delaware*. Just in connection with this matter I want to say that we are on the outset of a nation venereal campaign, and we as health officials can make use of that campaign in furthering the compulsory use of nitrate of silver or some other prophylactic in the eyes of babies. We have recently at our special session of the Legislature passed a bill covering this matter, and I may state that I intend to make use of the national propaganda in awakening the doctors to the importance of this matter.

## REPORT OF COMMITTEE ON RECENT ADVANCES IN SANITARY LAWS, ORGANIZATION AND PRACTICE.

PRESENTED BY MR. H. A. WHITTAKER,  
*Director, Division of Sanitation, Minnesota State Board of Health, Chairman.*

The committee, in presenting its report, desires to define the field of inquiry which it has covered. It should be explained that the activities of this committee are now limited to recent advances in sanitary practice and do not include the collection of detail data on recent sanitary laws. The Conference decided at the 1916 meeting that recent sanitary laws were compiled by the United States Public Health Service; hence, the duplication of this material was unnecessary.

The committee has interpreted recent



advances in sanitary practice to include new material, exclusive of laws, along any line of health work in which boards of health or departments of health have undertaken work during the past year and which information might be helpful to others. The committee wishes to explain that the subdivisions of health activities used in the compilation of this report should not be misconstrued as an attempt to suggest the proper subdivision of health work. These subdivisions have been used simply as a means of securing and recording data on some of the most important phases of health work.

Inquiries were sent to 62 states and territories in the United States and provinces in the Dominion of Canada. Replies were received from 34 boards and departments of health of which 28 reported recent advances in sanitary practice in their respective districts.

#### ALBERTA.

The Provincial Board of Health reports that it has recently been transferred from the Department of Agriculture to the Provincial Secretary. It is believed that this change in administration will extend the activities of the Board of Health more extensively into the field of public health work.

#### ARIZONA.

The State Board of Health reports recent activities in administration, which include the enforcement of the compulsory vaccination law, the making of venereal diseases reportable, and the punishment by fine or imprisonment for failure to report these diseases.

#### CALIFORNIA.

The State Board of Health reports recent activities in administration and in public health education.

*Administration:* A bureau of venereal diseases has been established and six state health districts have been created.

*Public Health Education:* Bulletins have been published on the following subjects, during the past year: water supplies, milk, sewerage disposal, ventilation, tuberculosis, smallpox, syphilis, gonococcus infections, rabies, poliomyelitis, dental hygiene, and the destruction of ground squirrels and rats.

*Venereal Diseases:* See administration.

#### CONNECTICUT.

The State Department of Health reports recent activities in administration, vital statistics, communicable diseases, sanitary engineering, laboratory, child hygiene, public health education, public health nursing, and venereal diseases.

*Administration:* The State Board of Health has been abolished and a Department of Health organized. Certain important health laws have been enacted.

*Vital Statistics:* An experienced director has been placed in charge of this work and a punch card system of records inaugurated.

*Communicable Diseases:* The daily reporting of communicable diseases is required and follow-up work on typhoid, smallpox, etc., has been started.

*Sanitary Engineering:* The appropriations for sanitary engineering have been increased from nothing to \$30,000. A special board has been created for the study of industrial wastes and stream pollution, and intensive studies are being made by a special corps of workers on wastes which up to the present time included silk, dye, iron, brass and shoddy wastes.

The approval of the State Health Department is now required on all installations of or additions to water supplies and sewerage systems.

*Laboratory:* The location of the laboratory has been changed from Middletown to New Haven and its work has been enlarged to include the study of industrial wastes.

*Child Hygiene:* Plans have been made for adding a supervisor of child hygiene at an early date.

*Public Health Education:* The education-work is carried on by means of bulletins, pamphlets and leaflets, which are popular in character. Two small exhibits, provided with lantern slides for lectures, are used in connection with this work.

*Public Health Nursing:* A special survey has been undertaken on public health nursing in the state, and a report has been printed on the subject which is ready for distribution. It is contemplated that public health nursing will be added to the department at an early date.

*Veneral Diseases:* The reporting of venereal diseases has been enforced and the new sanitary code requires physicians to make monthly reports on cases under treatment, which is in addition to the original report. Refractory cases are subject to committal by the health officer and free examinations are permitted.

#### DELAWARE.

The State Board of Health reports recent activities in venereal diseases. Rules and regulations have been prepared with the view of controlling the venereal disease situation.

#### DISTRICT OF COLUMBIA.

The Department of Health reports recent activities in communicable diseases and laboratory work.

*Communicable Diseases:* A contagious disease card has been perfected and has been found to be very satisfactory.

*Laboratory:* Circulars and cards have been prepared to be used in connection with the collection of blood for examination and specimens supposed to contain merozoeci. A special card has been adopted which will insure secrecy.

A circular is being sent to druggists in

the District of Columbia cautioning them with respect to the keeping of biological products.

#### HAWAII.

The Territorial Board of Health reports recent activities in administration, vital statistics, communicable diseases, sanitary engineering, child hygiene, public health nursing, venereal diseases, and research.

*Administration:* A bureau for the control of venereal diseases and a bureau for the treatment of correctable defects among men drawn by the selective draft have been organized. Improved filing systems have been installed.

*Vital Statistics:* The latest standard birth and death records of the Census Bureau have been adopted. A drive has been organized throughout the territory for the better recording of births. The services of all clergymen and school teachers in addition to the aid rendered by the physicians and parents have been enlisted.

*Communicable Diseases:* The method for the collection and reporting of morbidity statistics, which was approved by the last Conference, has been adopted. Disease carriers are handled by quarantine and each case is treated until cleared up. In cases of typhoid, three negative stools, taken six days apart, are obtained before the patient is released. After release from quarantine, the patient is kept under observation for a number of months.

*Sanitary Engineering:* A laboratory has been installed for the investigation of water supplies and charts are issued showing the data obtained. Model plantation houses, wash rooms, kitchens, sanitary privies, etc., are made to scale for the guidance of those desiring to erect same.

A new map system of cities, villages and plantation camps, for the use of sanitary engineers, has been completed.

*Child Hygiene:* Work is being contemplated on this subject in cooperation with

the Women's Committee of the Council of National Defense.

*Public Health Nursing:* The anti-tuberculosis field work has been enlarged during the past year.

*Veneral Diseases:* Regulations have been adopted for the control of gonorrhea and syphilis. The plan for a campaign on this subject has been taken from the methods adopted by Massachusetts and California.

*Research:* Work is now being conducted on leprosy in coöperation with the United States Public Health Service at their Leprosy Investigation Station. The progress made in this work is a matter of report for the United States Public Health Service.

## ILLINOIS.

With the enactment of the Civil Administrative Code which became effective July 1, 1917, there was a complete reorganization of state health agencies in Illinois. The old State Board of Health which served both as a health organization and examining and licensing board, was abolished. In its place there was created a State Department of Public Health shorn of the functions of examination and licensure. This department is one of the nine major divisions of state government and is under the supervision of a director of public health who is a member of the Governor's Cabinet.

### *I. Administration.*

With the complete reorganization of the State Health Department, there have been created eleven divisions, each with its own chief and operating personnel, but all thoroughly coördinated through the executive division. The newly created divisions are as follows:

1. Executive Division.
2. Division of Communicable Diseases.
3. Division of Tuberculosis.

4. Division of Venereal Diseases.
5. Division of Sanitary Engineering.
6. Division of Vital Statistics.
7. Division of Child Hygiene and Public Health Nursing.
8. Division of Surveys and Hygiene.
9. Division of Diagnostic Laboratories.
10. Division of Hotel and Lodging House Inspection.
11. Division of Public Health Education.

The contact between these central divisions in all sections of the state is maintained by a staff of full-time medical health officers, each assigned to his individual district. Health administration through this contact will be rendered more efficient through the recent enactment of a law empowering counties or townships to unite as sanitary health districts, to levy a special tax, to employ full-time health officers, nurses, chemists and assistants and to operate offices and laboratories. Administration is also improved through the state and county collaborating health service now in the process of organization. This service is made up of representatives of county medical societies who act for the State Department of Public Health in case of emergencies or in the absence of the district health officer, the representatives of all counties being brought together from time to time at central points for public health conferences with the understanding that the representatives will carry back to the meetings of the county medical societies the results of these conferences.

### *II. Vital Statistics.*

The division of vital statistics was reorganized at about the time that the birth and death law of 1915 became thoroughly operative. This law which provides for local registrars in every city, village, township and road district in the state, and which is on the whole a very satisfactory piece of legislation, was amended in 1917 to eliminate certain features which had

proved of theoretical rather than of practical value. An entirely new system of registering and tabulating births and death deaths has been adopted since July 1, 1915 and the division has been supplied with card punching machines and other modern equipment.

### *III. Communicable Diseases.*

This division has been entirely reorganized and rules and regulations for control of communicable diseases have been thoroughly revised since July 1, 1917. The central office of the division keeps in touch with the various sections of the state through full-time health officers appointed under Civil Service and assigned to definite districts.

A new method of recording morbidity statistics has been established. The standards recommended by the American Public Health Association Committee on Morbidity Statistics, including the classifications of communicable diseases by age groups, have been adopted. An immediate report of all such communicable diseases, as well as weekly and monthly summaries are made to this division by the various health jurisdictions throughout the state. The division in turn sends to the different district health officers a daily summary of communicable diseases in the district.

All cases of infantile paralysis are checked and listed and follow-up work is done by visits of the department nurse and through the establishment of clinics for the after-care of victims of the disease.

The sanitation of the extra-cantonment zones is under the supervision of this division. A check is kept on all communicable diseases which appear in the zones and the medical officers are governed in the granting of leaves of absence by a report of communicable diseases throughout the state, which they receive regularly from this division.

### *IV. Sanitary Engineering.*

This division has been completely reorganized with special attention to disposal of human wastes in rural communities.

The work of making analyses of water used for drinking purposes on interstate carriers has recently been taken over by this division. This work was formerly done by the United States Public Health Service.

During the past year a number of the counties throughout the state have taken advantage of a recently enacted law and are preparing to build tuberculosis sanatoria. In connection with this work the Sanitary Engineering Division has been called upon in several instances to pass upon proper sites for the buildings and also to look into matters pertaining to water and sewerage facilities.

### *V. Laboratory.*

During the past few months the laboratory has placed its services at the disposal of all physicians of the state in the matter of making Wassermann tests free of charge. Group diagnoses in pneumonia will be begun by August 1st.

The entire clerical system of the laboratory has been reorganized. History sheets have been standardized and a simple but efficient cross index filing system for reports has been instituted. Instead of the usual printed blanks for reports a personal form letter on half-size letterheads has been introduced.

The mailing cases have been standardized and made of as small a size as is coördinate with good results, in order to save postage to both the laboratory and its patrons, each case being stamped on the outside in conspicuous letters with the name of the test for which it is intended.

### *VI. Industrial Hygiene.*

The work in industrial hygiene in the state of Illinois is carried out under the supervision of the Department of Labor,

the State Department of Public Health cooperating in certain technical phases of this work.

### *VII. Child Hygiene.*

In its newly organized work in child hygiene the department has engaged the cooperation of such extra-governmental agencies as the Woman's Council of National Defense, the Elizabeth McCormick Memorial Fund and the Illinois Association for the Prevention of Blindness. The present activities include a campaign for 100 per cent registration of births, the encouragement of the employment of community nurses in all counties of the state, the operation of a training course for public health nurses with special accent on child hygiene, the further development of a system of clinics for the re-education of crippled children and victims of poliomyelitis; the encouragement of better babies health conferences and the development of maternity clinics and child welfare stations; the organization of a central supply station for child welfare exhibit material, bringing together all of the exhibit material controlled by governmental and extra-governmental agencies.

### *VIII. Public Health Education.*

The department maintains a large traveling health exhibit made up of mechanical models, etc. A considerable number of parcel post exhibits are loaned to organizations and communities. There is also maintained a regular press service covering the newspapers of the state and a popular illustrated health journal is issued monthly. All of the circulars for information on communicable diseases and sanitation and the rules for the control of communicable diseases have been revised and re-edited and a considerable number of new publications have been added. The department maintains loan collections of stereopticon slides, motion picture films, etc.

### *IX. Public Health Nursing.*

The newly established division of public health nursing furnishes nurses for epidemiological work carried out by medical field officers of the department. A special training course for public health nurses has been established.

### *X. Venereal Diseases.*

The department has promulgated and enforced rules providing for the reporting of venereal diseases and the control of infected persons and has had special representatives in the sanitary zones about military cantonments for the purpose of examining individuals caught in immoral resorts. Infected persons are committed by the courts to hospitals for treatment and are there held until proven noninfectious by laboratory tests. The newly organized division of venereal diseases is in charge of this work.

## INDIANA.

The State Board of Health reports recent advances in administration, child hygiene, and venereal diseases.

*Administration:* Rules have been passed requiring the reporting of venereal diseases. Rules requiring the reporting of venereal diseases were passed in 1911, but the same were not enforced because of the terrific opposition met with among physicians. Now after a period of education, the Indiana board repealed their first action and passed rules more up-to-date and is now proceeding energetically to enforce them.

*Child Hygiene:* The Indiana State Board of Health has been pushing this work for a long time and is now centering its efforts upon securing a compulsory law in regard to medical inspection of school children. The State Board of Education has entered with the State Board of Health and the State Teachers' Association has appointed a strong committee to act with the state board. The propaganda for the new law

has been carried on for some months and will be pushed hard and strong until the meeting of the legislature in January, 1919. The governor announces himself as strongly in favor of such compulsory law, and in his speeches over the state is continually announcing the fact.

*Veneral Diseases:* A superintendent has been appointed in charge of this division who immediately commenced the work and made certain arrangements with the Indianapolis City Board of Health, the police, and the police judge. The Indianapolis Board of Health set aside a large ward on the third floor of one of the wings of the City Hospital for quarantine purposes. The police were instructed to arrest all prostitutes who were supposed to be plying their profession. The judge methodically remanded them to jail for further evidence, and this permitted medical examination. All those who were found infected were quarantined. Some of them were convicted and first underwent imprisonment at the Women's Prison at Indianapolis. While there, they were treated, and when term of sentence expired and they were dismissed from prison, they were immediately arrested and placed in quarantine and treatment continued. This work is still going on at this time.

Application was made to the United States Public Health Service for an officer in uniform to help organize the state and establish venereal clinics. A surgeon has been detailed for such a purpose and will commence work in this state not later than June 1st. The surgeon and an assistant, both in uniform, will tour the state, meeting medical societies, mayors and city councils to the end that a hard and strong fight may be made on this problem.

#### IOWA.

The Department of Health and Medical Examiners report recent activities in vital statistics, communicable diseases, public

health education, venereal diseases, and research.

*Vital Statistics:* A new vital statistics law went into effect January 1st, requiring all births to be recorded in the office of the county clerk of courts. This law is proving to be working very satisfactorily on account of its simplicity.

*Communicable Diseases:* Quarantinable diseases are similar to other states, but in addition, measles, mumps, whooping cough and chickenpox are placarded.

*Public Health Education:* An educational campaign is conducted at the State Fair, where a large exhibit is shown. Exhibits are sent out to various communities free of charge. These relate more particularly to child hygiene.

*Veneral Diseases:* A resolution and rule has been enacted which relates to the reporting and interning of persons having diseases, and treatment is given.

*Research:* Research work has been undertaken in the laboratory on the following topics: tuberculosis, hydrophobia, infantile paralysis, venereal diseases, etc.

#### KANSAS.

The State Board of Health reports recent activities in vital statistics, sanitary engineering, child hygiene, public health education, public health nursing, and venereal diseases.

*Vital Statistics:* A new method has been devised for checking registration, which is used in coöperation between the division of vital statistics and the division of child hygiene.

*Sanitary Engineering:* Investigations have been undertaken on the more or less new and difficult problem of the care of oil and salt water wastes from certain oil fields in the state. These wastes have been threatening the water supplies of a good many cities and have put the water supplies of several cities out of commission for domestic use. In the deep Butler oil

field, the oil is found together with large quantities of salt water which comes off with the oil and the difficult problem is how to deal with these salt water wastes. The present method of handling this waste problem is to build large impounding reservoirs in which the salt water is allowed to flow where it is taken care of through the process of evaporation or by hastening this process by burning refuse or oil on the water. The oil companies are compelled through legislation to adopt this method.

*Child Hygiene:* The division of child hygiene is attempting to follow out the program of the Medical Section of the National Council of Defense in Child Welfare Work, together with the distribution of rather unique literature and the sending out of prenatal letters to those who have been registered in their "Confidential Mothers' Registry." After the child is born, birthday letters are sent out each year until the fifth birthday.

*Public Health Education:* The Public Health Exhibit Car "Warren" is kept on the road constantly and is in charge of two public health nurses. A feature of this work is the visit of the public school children to the car. An effort is made to have an assignment made to every pupil to write an essay on some phase of public health which they saw in the exhibit or heard in the lectures. In other words, the matter of visiting the car is not to be regarded as a "lark" or holiday, but as a lesson task, upon which recitation shall be made later. It is designed to place in the hands of each school child in the state one of the new health rule cards.

An immense quantity of pamphlets have been distributed in connection with a special drive on the prevention of pneumonia.

*Public Health Nursing:* The State Board of Health, through its public health nurses or a representative of the State Board of Health, is trying to see personally each

young man who has been rejected from military service on account of tuberculosis. Experience in this state has demonstrated that the only satisfactory way to get these men interested in the sanatorium treatment for tuberculosis is by personal visitation. A large number of tent houses have been erected at the State Tuberculosis Sanatorium for the special care of rejected soldiers.

*Veneral Diseases:* Regulations have been passed covering the entire state similar to those which have been in operation in the extra cantonment zone at Camp Funston and Fort Leavenworth. Infected prostitutes are isolated at the State Detention Farm, which is located at the State Penitentiary. At the present time about one hundred women are interned to quarantine at this Farm and recently two men have been interned for the same trouble. Habeas corpus proceedings are before the Supreme Court of the state for the release of five women from Topeka who are interned here. The first trial before the District Court was in favor of the state.

#### KENTUCKY.

The State Board of Health reports recent activities in administration, vital statistics, child hygiene, public health education, public health nursing, and venereal diseases.

*Administration:* The state legislature passed an act relating to the public health whereby the State Tuberculosis Commission, the Bureau of Hotel Inspection, the Pure Food and Drug Division of the Agricultural Experiment Station are incorporated in and become bureaus under the control of the State Board of Health, preventing unnecessary duplication of work, and increasing the annual appropriation of the board to \$115,000, and so enlarged the activities of the State Board of Health as to make it possible to bring about a

more rapid progress in the advancement of all public health activities heretofore managed under these separate departments of state. This act further provides that county or district departments of health may be established which, under the supervision of the State Board of Health, can select whole-time health officers, and this advance in legislation offers an opportunity for such progress in public health as will make it possible to control sanitation and rural health and prevent epidemics, and will mark an epochal period in the history of health legislation in the state. This law will go into effect on June 21, 1918, and until the law becomes operative, and the merger of all departments takes place, a complete and detailed outline of the policy of the State Board of Health relating to the activities of these departments cannot be given.

The bacteriological Laboratory and Bureau of Sanitary Engineering under the new law will be united with the laboratories now operated by the State University and their activities developed jointly. The heads of these departments will be in position to have more intensive coöperation from the district sanitary inspectors and county health officers, and will be able to conduct more systematic field investigation and follow-up work. A plan will be worked out whereby disease carriers will come under such supervision as will make them a source of minimum danger.

*Vital Statistics:* Kentucky has had, since 1911, a model vital statistics law, and the same was operated so successfully as to secure the admission of the state into the death registration area one year after the law became operable and during 1917, to be admitted into the birth registration area, since which time the state registrar has been a special agent of the Census Bureau, and has had the franking privilege of the government for the purpose of

securing more accurate reports where birth and death certificates show incomplete data. A system was established in 1917 which makes it possible to secure more complete returns of births and deaths from those counties in the state which in 1916 had a death rate of under 10.0. Each local registrar and physician in such districts were notified at regular intervals if their records failed to show a report for a period of two months or over, and as a result of this intensive work, about one-third of the former delinquent counties produced better records than for any previous year. Automatic machines and modern labor saving devices have been installed for the vital statistics work.

*Child Hygiene:* The secretary of the State Board of Health was appointed in 1917 collaborating epidemiologist by the United States Children's Bureau, and has succeeded in collecting from the various active health officers and Health and Welfare Leagues such data as will lay the foundation for future work. In a few counties where intensive rural sanitation is in progress, visitation and supervision over child life in the school is being carried on with a marked degree of success. A plan is now on foot whereby much information as to the environment and personal hygiene of children will be secured in a census to be made by the state superintendent of Public Instruction.

*Public Health Education:* An exhibit was held at the State Fair where charts, maps, forms and models demonstrating conditions and suggesting improvements were shown. A large room was provided for this exhibit and aroused great interest. It was visited by thousands of people who were lectured to by the various heads of departments. Rural Life Conference and County Teachers' Institutes have been visited; bulletins and circulars of information to the public are mailed at frequent intervals and the newspapers



supplied with matters of interest to the public.

*Public Health Nursing:* This work in the past has been under the supervision of the State Tuberculosis Commission with a varying amount of success, some twenty counties being supplied with public health nurses, and much good accomplished. The future of this phase of public health work is bright, and under the new organization will be given such impetus as to afford every opportunity for decided improvement.

*Veneral Diseases:* The recent activities on the part of the State Board of Health relative to this subject may be found in the *Kentucky Medical Journal* for May 1, 1918.

#### LOUISIANA.

The State Board of Health reports recent activities in vital statistics, communicable diseases, laboratory, industrial hygiene, child hygiene, venereal diseases, and research.

*Vital Statistics:* Automatic devices for recording statistics have been installed. The 1917 records have been completed by means of the machine which is a most remarkable labor saving device.

The follow-up of casket sales has proven to be most helpful in connection with vital statistics.

The Women's Clubs have been asked to assist in the registration of births and a large number additional to those usually reported were received in this way.

*Communicable Diseases:* During the past year, laboratory reports have been checked and report cards together with a letter sent to every physician who has not reported the cases of communicable diseases which are discovered from the specimens sent to the laboratory. Strenuous efforts have been made to have local health officers isolate meningitis carriers.

*Laboratory:* Extensive use has been made of the laboratory car, during the past year, which work has proven very satisfactory.

*Industrial Hygiene:* Field investigations have recently been undertaken relative to odors and the control of same.

*Child Hygiene:* Coöperatively with vital statistics and medical inspection work, examinations have been made on school children and instructions given to midwives.

*Veneral Diseases:* Laws, recommendations, and data have been collected and a "War Measure" placard framed and posted publicly.

*Research:* Work has been undertaken on a study of the toxic properties of Oil of Chenopodium.

#### MAINE.

The State Department of Health reports recent activities in administration. The former State Board of Health went out of existence in July, 1917, and a State Department of Health has been created. The department mentions new activities in child hygiene and venereal diseases.

#### MASSACHUSETTS.

The State Department of Health reports recent activities in communicable diseases, child hygiene, and venereal diseases.

#### MICHIGAN.

The State Board of Health reports recent activities in administration which includes the organization of the Social Service Department for the suppression of Venereal diseases.

#### MINNESOTA.

The State Board of Health reports, recent activities in administration, communicable diseases, sanitary engineering, and venereal diseases.

*Administration:* The State Board of Health has created a division of venereal diseases, and has been authorized to supervise the after-care of persons disabled by poliomyelitis. A special fund of \$50,000 was appropriated by the last legislature to

cover a two year period of poliomyelitis work.

*Communicable Diseases:* The supervision and after-care work of the persons disabled by poliomyelitis has been assigned to the division of preventable diseases. The division was unable to secure an orthopedist owing to the demands of the army for specialists; therefore, a specially trained nurse was engaged to examine patients and instruct nurses. The clinics were attended by an epidemiologist from the division who made diagnoses and conferred with physicians. The Surgeon-in-chief of the Minnesota State Hospital for Indigent, Crippled and Deformed Children, acted in an advisory capacity without salary.

At the first series of clinics, June 18 to September 28, 1917, 1,051 cases were examined in 16 cities, selected as clinic centers because of the number of reported cases in contiguous territory. The state was then divided into 7 districts, and a nurse placed in charge of each under the general direction of the supervising nurse, who assumed charge of the work after the first series of clinics and instruction of the nurses had been completed. Records quite similar to those of New York, Massachusetts, and Vermont were used in the clinic work; weekly reports are made by each district nurse, the results being entered on cards at the central office, from which advice and assistance are given as necessary.

In the second series of clinics, begun October 30, 1917, finished January 23, 1918, 808 cases were examined, 402 of which had not previously been examined. These clinics were held in 23 places.

The third series of clinics is now going on, and hundreds of cases never before examined have asked for appointments.

The results of the work exceed the most sanguine expectations. Not only have many persons recovered under treatment

wholly or partly from paralysis or other disability, thus saving the state possible future expense due to dependency, but the clinics and the work of the nurses in the homes may be regarded as the entering wedge for a general public health campaign in which new interest will be awakened throughout the state.

The State Hospital for Indigent, Crippled, and Deformed Children has received for operative treatment a large number of cases. Orthopedists, surgeons and hospitals throughout the state have cheerfully given their services in cases too poor to pay. Everywhere there has been shown a spirit of sympathy and coöperation indicating that this new departure of state work is well received and appreciated by the medical profession and the general public.

Laboratory and field investigations in poliomyelitis and meningitis have been extended through increase of workers under the special fund. The greatest advance has been in securing two specially trained nurses for epidemiological work. These nurses supplement the work done by the epidemiologists, and train school and public health nurses in emergency work. A field nurse corps of this character is a splendid investment for a state health department, especially in the states where local boards of health are unable to employ nurses owing to lack of funds.

*Sanitary Engineering:* The Division of Sanitation has recently extended its routine activities to the investigation of milk supplies from a health point of view. The sale of certified milk has been investigated and the supervision of dairies producing this product has been put on a systematic basis. The requirements for certified milk are defined by regulations of the State Board of Health. Routine investigations are undertaken on municipal and institutional milk supplies with the view of improving their sanitary quality. This work includes a thorough study of the dairy

farms, milk depots, methods of transporting and distributing the milk, pasteurization plants, and analytical examinations of the milk. A portable field laboratory has been equipped for bacteriological, physical and chemical examinations of milk. The entire equipment included in this portable laboratory is shipped in two trunks which have been especially designed for the purpose. This equipment has greatly facilitated the field work on milk supplies.

Special studies are now in progress on the pasteurization plants of the state. These studies include the engineering aspect of these plants and their equipment, and samples of milk are collected during the various stages of treatment in order to detect imperfect equipment or operation. These investigations are being undertaken to secure data on which laws or regulations will be made to control the operation of pasteurization plants from a public health point of view.

*Veneral Diseases:* At its January meeting, the Minnesota State Board of Health authorized a division of venereal diseases, and adopted regulations governing the control thereof. These regulations provided for the reporting of venereal diseases by an identification number; for requiring infectious cases to remain under treatment, for controlling carriers of the disease; and for such quarantine as shall be necessary to deal with incorrigible cases.

The board received in February an appropriation of \$35,000 for carrying on the work of this division, which will be organized along several lines.

Laboratory work, including the examination of smears for gonococcus, and Wassermann tests for syphilis, will be carried on by the board. This diagnostic service will be extended without cost to physicians and institutions in the state. Free salvarsan will be districted where necessary for assisting in rendering indigent syphilitics

non-infectious; \$5,000 has been set aside for the purchase of salvarsan or recognized therapeutic equivalents.

Extensive educational work will be undertaken in this division and will be in charge of a supervisor of Social Hygiene Education. This will include the organizing of classes in Normal Schools, Universities, Women's Clubs, Parents' and Teachers' Associations, and other organizations, for the study of sex hygiene and the venereal disease problem. The distribution of pamphlets, placing of exhibits and posters, and a lecture service will be a part of this work.

Social service and protective work will be carried on by the chief social worker, and two assistants employed as protective workers under her direction. The social service and medical activities in particular will be conducted in the closest possible coöperation with the medical, military, and law enforcement officials, throughout the state.

*Research:* Investigations have been undertaken and reported during the past year on the following subjects: public baths and swimming pools.

#### MONTANA.

The Department of Health reports recent activities in administration, laboratory and child hygiene.

*Administration:* A division of child welfare has been established and the hygienic laboratory and the water laboratory have been reorganized.

*Laboratory:* The investigation work on water supplies has been very materially increased during the past year and its scope extended to water purification plants.

*Child Hygiene:* The law creating a division of child welfare gives the county Commissioners and School Boards authority to employ county and school nurses, and places all public health nurses under the jurisdiction of the State Board of

Health. An attempt has been made to get the Women's Clubs interested in the proper enforcement of birth registration.

#### NEW JERSEY.

The State Board of Health reports recent activities in administration, vital statistics, communicable diseases, sanitary engineering, laboratory, child hygiene, public health education, public health nursing, venereal diseases, research, and food and drugs.

*Administration:* The work formerly conducted by the division of milk control relative to the inspection of dairies and creameries has been merged with the work of the Bureau of Food and Drugs and said division has been abolished, one representative of the division being assigned to make a special study and investigation relative to the manufacture and sale of ice cream in the state.

The department has previously been carrying on some work in relation to child hygiene, but an additional appropriation of \$25,000 to be used exclusively for this work will be available on July 1st, and it is the intention of the department to considerably enlarge the scope of this branch of the service, which is believed to be one of the most fruitful in public health work.

Under an act passed at the last session of the legislature, the department is now permitted and directed to make a charge for the examination of samples of water, milk and foods for private parties. This will undoubtedly result in a slight increase of revenue for the state, as the money must be turned into the State Treasury and will also tend to prevent the laboratory from being overwhelmed with demands for private or semi-private service.

Under an act passed at the 1918 session of the legislature, the department is also permitted to establish a petty cash fund which will furnish money in advance to the inspectors for traveling expenses and

for expenses in connection with moving the child hygiene exhibits from place to place. It will relieve the traveling men of financial embarrassment and will tend to increase efficiency in the work.

*Vital Statistics:* A new tabulating machine for tabulating deaths has been installed and has been found to be of great advantage in this line of service. A marked improvement was shown in the registration of vital statistics during the past year.

*Communicable Diseases:* The supervising of sanitary units organized to enforce health regulations in special extra cantonment zones around military camps has been undertaken, and efforts to increase efficiency in the handling of morbidity reports have been made.

*Sanitary Engineering:* An act was passed at the last session of the legislature providing for the examination and licensing of operators of sewage and water treatment plants in the state.

*Laboratory:* Routine free examinations are now made of specimens by Wassermann's method, collected from suspected cases of syphilis. Routine examinations are also being made of smears from suspected cases of gonorrhoea and free examinations of other specimens from venereal cases. The laboratory is well equipped to do its part in the control of venereal diseases in the state.

The laboratory is also rapidly extending its output of culture media to local laboratories throughout the state, this being of very great assistance to small institutions operated by part time or partly unskilled men. The experience of several years has shown that the furnishing of standard solutions, culture media, stains and the like to local boards of health and water and sewage plant laboratories has resulted in stimulating these agencies to carry on much more extensive bacteriological work than they would otherwise do.

The laboratory is also preparing to make differential examinations of cultures from cases of pneumonia for the purpose of ascertaining the type of pneumococcus involved.

*Child Hygiene:* On May 1, 1917, a large Child Hygiene Exhibit was started on the road which has already been shown in a number of places in the state. Lectures, with lantern slides, are given on Dental Hygiene and several new films have been added to the exhibit material, as follows: "Oral Hygiene," "Dental Prophylaxis," "A Day in A Baby's Life," "Summer Babies," "The Price of Thoughtlessness," "The Trump Card" (showing the necessity of pasteurizing milk), and "The Fly Pest." A new motion picture machine has been purchased for use in exhibit work.

A new edition of the leaflets issued two years ago on child hygiene has been printed and two new leaflets have been added, "The Public Health Nurse," and "Saving Mothers," the latter being a reprint from Children's Bureau.

*Public Health Education:* Included in child hygiene.

*Public Health Nursing:* A list of organizations in the state employing public health nurses, as well as a list of such nurses and the nature of their work, has almost been completed. This line of work will be undertaken more extensively when new appropriations become available July 1st.

*Venereal Diseases:* Considerable work in this line is being undertaken in connection with the supervision of sanitary units around military camps as referred to under communicable diseases.

*Research:* A survey of state and county hospitals for the care of tuberculosis has been made during the year, the object being to obtain statistical data relating to the patients and to learn of the existence of insanitary conditions which should be removed.

A study of the work of various bureaus of the department for the purpose of ascertaining whether the money appropriated for health purposes was expended in a manner which would insure an adequate return in health protection and disease prevention has also been undertaken.

*Food and Drugs:* A new plan of making sanitary inspections of dairies has been instituted. Under this plan, physical examinations of dairy cattle are made in so far as the limited force of the bureau will allow, and samples of milk collected for chemical examinations. This method of investigation has proved satisfactory in that it has prevented a duplication of work, the inspection of dairies, the physical examination of dairy animals and the collection of milk samples having in the past been performed by separate bureaus.

#### NEW YORK.

The State Department of Health reports recent activities in administration, vital statistics, communicable diseases, sanitary engineering, laboratory, child hygiene, public health education, public health nursing, and venereal diseases.

*Administration:* A Bureau of Habit Forming Drugs has been organized. By a recent act of the legislature, this bureau becomes a separate department under a commissioner after November 1, 1918. For further details, see page 21, January *Health News*.

The legislature of 1918 has just passed a law creating a bureau of venereal diseases and granting an appropriation of \$30,000 for the work of the bureau. A comprehensive program has already been mapped out and it is expected that great strides will be made in this work in coöperation with the national drive outlined by the Council of National Defense. The more important features of this program are: (a) Increased facilities for treatment, in-

cluding free distribution of arsenical preparations; (b) Intensive campaign of education; (c) Establishment of a bureau of information with a consultant in charge, whose services will be available both to physicians and the public.

Another bill which has passed the legislature and now awaits the governor's signature gives to health authorities the power to examine any persons reasonably suspected of being infected with venereal disease and provides for the isolation and treatment of such persons.

The state commissioner of health may combine into one health district, known as a Consolidated Health District, any two or more towns, villages, or cities on request of the town, village, or city authorities. During the year, eleven health districts have been consolidated through the efforts of the department. By such consolidation, it is possible to secure greater coördination and also greater efficiency. A total of 1,452 health districts in the state are now represented by 1,076 health officers.

A model sanitary code for local boards of health has been developed, based on essential features of the state sanitary code. This model sanitary code has already been adopted by 718 of the local health boards and will undoubtedly be adopted by many more in the near future. The advantages of their adoption are twofold: first, the towns and villages adopting them will have sanitary regulations which are in accord with modern science and which, through experience, have been proven entirely workable; second, uniformity in health regulations.

The infantile paralysis epidemic of 1916 emphasized the necessity of having such model regulations. During this epidemic many towns and villages hurriedly and without sufficient consideration adopted health regulations, and some of these, as was to be expected, were unscientific and unworkable. Practically no two jurisdic-

tions adopted the same rules and regulations. The result was confusion in the law and the enforcement thereof.

In 1915 the Public Health Council passed the following resolution: "*Resolved*, That local health officers appointed after November 1, 1916 (which time has been extended to July 1, 1918), shall have the following qualifications: (1) They shall be graduates of medicine of not less than three years' standing; (2) They shall, when appointed, be not less than twenty-four nor more than sixty-five years of age; (3) They shall have complied with one of the following requirements: (a) They shall have taken a correspondence course in public health of one year with at least one week of practical demonstration work in laboratory and field work, both correspondence course and demonstrations to be approved by the Public Health Council, with examinations and certificate. (b) They shall have taken a course in public health of at least six weeks including practical laboratory and field work with lectures and reading at an educational institution, such course to be approved by the Public Health Council, with examinations and certificate. (c) They shall have submitted evidence satisfactory to the Public Health Council of special training or practical experience in public health work, with examination if required by the Council; provided, however, that under special conditions specified in writing by the local board of health or other appointing power or by the health officer, any of these qualifications may be waived by the Public Health Council."

As a result of this resolution, four of the Universities of the state now have courses for health officers, either residence or correspondence, or both. As the term for which health officers are appointed in this state is four years, it will be some time before all health officers are affected.

The legislature of 1917 made it manda-

tory on all counties having a population of over 35,000 to establish and maintain a county tuberculosis hospital. Prior to the passage of the law referred to, there were 14 counties which had under 35,000 population and of these 2 had provided hospitals through referendum. Of the remaining 43 counties of the state, there were at the time the law was passed, 2 counties having county tuberculosis hospitals connected with almshouses, 17 with county tuberculosis hospitals established under the county hospital law, 1 under a separate act, 1 established from private funds donated, and 1 each in six other counties, not established under the hospital law but receiving county patients.

At the time of the passage of the mandatory law, there were found to be 18 counties affected thereby. At the present writing, construction has begun in 4 counties, architects' plans have been approved in 2, plans are being prepared in 4, site has recently been approved in 1, 2 have appointed site committees, 2 are awaiting permissive legislation to combine in an establishment of a single hospital, 1 has petitioned for a hearing before the lieutenant governor, speaker and commissioner of health regarding a site, and 1 made provision for the care of patients in a sanatorium existing in that county, while another one is negotiating for such a provision. See also page 15, January *Health News*.

The following up of orders, recommendations, etc., is carried out through the sanitary supervisors, the state being divided into 15 districts averaging three to four counties each, each district being under the supervision of a sanitary supervisor who is directly responsible to the State Department of Health. The sanitary supervisor is required to visit the various local health officers in his district to stimulate them when necessary and to keep the central office in close touch with all matters of sanitary importance in his district.

Two epidemiologists, appointed during the past year, are under the supervision of the director of the division of communicable diseases. When in the field in charge of the control and suppression of epidemics, they are the direct representatives of the department. Except in emergencies, the time of one of the epidemiologists is employed in the office in intensive work on the communicable diseases.

*Vital Statistics:* During the year 1917, the chief progress made in the work of this division of vital statistics is covered in the following statements: (1) Intensive effort to obtain complete and accurate data on all birth and death certificates. (2) Special effort to improve birth registration, particularly by aggressive oversight of all midwives, the supervision being organized in a class method. (3) Improvement in the annual tables published by the division. (4) Preliminary plans, and beginning made in the deduction and transfer of non-resident deaths. (5) State institutions established as separate registration districts to facilitate the work indicated in the preceding item. (6) Systematic effort undertaken to prepare special tabulations and analysis of any unusually prevalent cause of death, such study to show where and to what extent the cause exists. (7) As a routine procedure the publication of press stories on matters of current interest or importance as disclosed by the monthly vital statistics analyses.

*Communicable Diseases:* The division of communicable diseases reports the adoption of the minimum morbidity standards recommended by the American Public Health Association Committee on Minimum Standards for Morbidity Statistics, including classification for communicable diseases in age groups by months under 1 year; by single years from 1 to 20, and by 5 year periods from 20.

A punching machine for punching the following items for each communicable

disease report, with the exception of those for tuberculosis, is now in use: (1) District number; (2) Year; (3) Month; (4) Sex; (5) Color; (6) Conjugal condition; (7) Age; (8) Disease, by number in order listed in Sanitary Code; (9) Place of infection; (10) Laboratory tests: (a) Vaccination (smallpox); (b) Positive Widal (typhoid); (c) Positive cultures (diphtheria, typhoid, dysentery, etc.); (d) Positive sputum (tuberculosis).

A single revised communicable disease report card has been substituted for the two cards previously used, and daily communicable disease report sheet for cities over 20,000 has been revised.

A tuberculin report and statement card has been substituted for the tuberculosis "Statement of Procedures and Precautions" blank formerly used.

A form for sanitary surveys in towns and villages has replaced the form formerly in use.

A score of health activities in cities has been prepared and recently issued to sanitary supervisors, and a few scores have up to this time been received.

A card for daily information of director of the division has been devised. Such cards are filled out daily for counties and large municipalities therein by the clerks who receive communicable disease reports.

A weekly report of communicable diseases by municipalities in each county in the district of a supervisor is sent to each such sanitary supervisor for his information. At present reports are being prepared based upon dates of report rather than upon dates of onset as heretofore, since the latter was misleading and unnecessarily complicated the preparation of such reports. In addition, a postal card, supplemented where necessary by telephone or telegram message, is sent to each supervisor upon discovery in the office of unusual prevalence of communicable diseases in the supervisor's district.

Regulations for the control of typhoid and diphtheria carriers have recently been revised.

*Sanitary Engineering:* The division of sanitary engineering reports changes and improvements in connection with water supply investigations.

In case of field investigations of public water supplies, the division has planned for the use of a small Ford car, which, by arranging inspection trips throughout the state, will permit of the inspection of water supplies at comparatively low costs and with less waste of time than where travel has to be done by train. This car will be provided with a special body designed to carry water containers and when necessary the emergency chlorination apparatus of the department.

The installation of emergency chlorination apparatus for public water supplies is a comparatively new part of the work. For this purpose, an outfit has been procured consisting of a small steel cylinder of chlorine, a chlorine control apparatus of the dry feed type, the necessary valves, etc., for connecting to the intake of a water supply, and the necessary tools for installing, together with a wooden chest for transportation of the outfit in a compact form. Upon request from municipalities or in case of water-borne typhoid fever epidemics, this apparatus can be installed upon very short notice.

The well-established plan of reporting upon laboratory water analyses of public supplies has been modified in such a way as to give somewhat greater opportunities for following up the work in investigating and reporting upon water supplies. Where recommendations have been made for improvements, the need for such improvements is again pointed out in the letters transmitting the analytical results.

Another departure has been the use of the score system in connection with the rating of the sanitary quality of water



supplies. Practically all of the 530 public water supplies of New York state are rated according to the score for sanitary quality.

A somewhat new duty has been undertaken during the past year in connection with the establishment of County Tuberculosis Hospitals. This work has consisted of inspections of many proposed sites for hospitals in counties throughout the state, in connection with the means for providing adequate water supplies of satisfactory sanitary quality, and with the question of proper disposal of sewage on the sites under consideration.

An investigation has been undertaken on the pasteurization plants of the state.

*Laboratory:* The division of laboratories and research reports that the complement fixation test for gonorrhea has become a part of their regular diagnostic work. Its importance is growing each month with increasing applications for the test from the physicians throughout the state, but, owing to the lack of clinical data, comparatively little light has been thrown upon the extent to which it can be relied upon in diagnosis.

A laboratory unit which is portable and completely equipped to take charge of epidemics of diphtheria, any of the enteric diseases, meningitis or pneumonia, is being assembled by the laboratory for use throughout the state. The equipment, including a gas plant, is packed in boxes which are so arranged with shelves that they may become cupboards or supports for table tops. Most of the apparatus is in duplicate so that either electricity or gas may be employed.

Within the last year, special efforts have been renewed to organize the laboratories of the state engaged in public health work, and to standardize with them the methods of making diagnoses of the communicable diseases. As an aid to standardizing the methods of diagnosis, stained preparations were made from a certain number of

specimens sent to the laboratory for diagnosis of diphtheria, and these preparations sent about to the various laboratories for diagnosis. Their results compiled with those made by the bacteriologists in the central laboratory were reported back to each laboratory; thus giving each bacteriologist in the state an opportunity of comparing his work with the other laboratories. At the present time, four specimens of blood of known agglutination titre are being distributed in the same manner, with a request that the Widal test be made and the results reported to the division of laboratories and research. The third method of standardizing the technique has been to edit a manual of the technique employed in the division of laboratories and research. Copies of these manuals will be sent to all of the laboratories. It will also have a value for the health officers because it contains a complete description of each diagnostic outfit employed by the laboratory.

Certificates of approval are issued each year by the commissioner of health to the laboratories, covering those phases of the work which they choose to engage upon provided they subscribe to the standard methods as submitted from the central laboratory, and after their bacteriologist has proven that he is qualified to carry on the work.

An organization, including a number of bacteriologists in the state, has been formed and this organization is being encouraged.

The laboratories of the state are usually visited each year by a representative of the division of laboratories and research, at which time local problems are discussed and the relation of the local laboratory to the central laboratory pointed out.

*Child Hygiene:* The division of child hygiene reports that during the past year child welfare exhibits were held in a large number of towns in the state of New York.

A department nurse was in daily attendance at each of these places and gave demonstrations on the care and feeding of babies. Lectures on various phases of child hygiene and infant welfare were given in connection with these exhibits. A large number of lectures on child hygiene and prenatal care have been given before mothers' clubs, church societies, county fairs, etc. In many instances these lectures have been illustrated by lantern slides. As a result of the child welfare exhibits, infant welfare stations were established in a number of localities and public health nurses have been employed in many places. "Little Mothers' Leagues" have been established in several schools in different parts of the state.

*Public Health Education:* The activities of this division embrace the publication of a monthly bulletin, 24 pages, called the *Health News* which has a circulation of 20,000; and the *Official Bulletin*, with a circulation of between two and three thousand. The first monthly issue of the *Official Bulletin* is devoted exclusively to vital statistics. The second issue of the month is the channel by which official orders and announcements of a general character are brought to the attention of health officers and those officially engaged in public health work. Mimeographed newspaper articles and boiler plate are issued from time to time to a selected list of newspapers throughout the state. The public is reached through exhibits, moving pictures, etc. The work of this division is in process of reorganization. A special drive was made during the last year in the dissemination of information relating to foods. A food exhibit has been kept continuously in the field and has very nearly covered the state. This exhibit has been accompanied by one and sometimes two lecturers from the department. It has been shown at all the county fairs and at

other gatherings of importance. Miniature traveling exhibits have been shown at a large number of public libraries. The sanitary supervisors give many lectures in their district, lantern slides being provided for them when desired.

*Public Health Nursing:* During the past year, the state has been divided into 13 districts, each in charge of a public health nurse and a nurse trained in the after-care of infantile paralysis. These nurses, working in coöperation with the sanitary supervisors of their respective districts, have investigated 49 outbreaks of communicable diseases in as many different localities, have made tuberculosis surveys of 5 different counties, and have conducted child welfare exhibits in a number of different municipalities, at which addresses were made on the subject of child welfare.

In addition, the registration of births has been investigated in the various municipalities in the state, and rural health surveys have been conducted in certain places.

Two nurses were in attendance upon the food exhibits shown in certain municipalities during the summer and fall. One of these nurses has continued with a traveling food exhibit giving talks and exhibits daily, and visiting a different municipality each week. One of the nurses has been permanently assigned to the supervision of midwives and is arranging for classes of instruction to be conducted for the proper training of all midwives in the state.

After the conclusion of the clinic for after-care of infantile paralysis, the nurses in their respective districts will arrange for a series of tuberculosis clinics to be conducted by eminent specialists throughout the state, and will also maintain a proper system of follow-up of the cases in the homes.

*Veneral Diseases:* See Administration.

## NORTH CAROLINA.

The State Board of Health reports recent activities in administration, vital statistics, communicable diseases, laboratory, child hygiene, public health nursing, and venereal diseases.

*Administration:* The organization of a Bureau of Epidemiology, requiring state wide reporting of communicable diseases and giving the state jurisdiction of their control. The organization of a Bureau of County Health Work under which nine health departments are organized and one additional county health department provided for. County health departments operate on an annual budget of \$6,000, half of which is from the county, one-fourth of which is from the state, and one-fourth of which is from the International Health Board. The central agencies, the State Board of Health and the International Health Board, have supreme control over the county health departments, appointing the executive officer and determining the plan of work. The organization of a Bureau of Medical Inspection of Schools, operating under a new state law, requiring the physical examination of every school child in the state every three years.

*Vital Statistics:* The state has been admitted into the registration area for births during the past year and it is also in the registration area for deaths.

*Communicable Diseases:* See Administration.

*Laboratory:* The production and distribution of diphtheria antitoxin, vaccine for smallpox, and vaccine for pertussis has been started since last year.

*Child Hygiene:* The county health departments are including a unit of infant hygiene work in addition to the recently organized Bureau of Medical Inspection of Schools.

*Public Health Nursing:* A public health nursing service is being organized and improved under the direction of the superin-

tendent of the State Sanatorium for Tuberculosis who is a member of the Executive Staff of the State Board of Health.

*Venereal Diseases:* Important action in the way of starting a campaign through the churches and moral agencies is about to be launched.

## OKLAHOMA.

The Department of Public Health reports recent activities in administration, vital statistics, communicable diseases, sanitary engineering, laboratory, and public health education.

*Administration:* The reorganization of the department into bureaus and the addition of the Bureau of Public Health Education and Bureau of Sanitary Engineering.

*Vital Statistics:* The installation of a model birth, death and morbidity law.

*Communicable Diseases:* The department is planning the addition of a Bureau of Communicable Diseases with a trained epidemiologist in charge.

*Sanitary Engineering:* The last legislature enacted a law creating a Bureau of Sanitary Engineering with full control of public works throughout the state.

*Laboratory:* In addition to the regular diagnostic water and sewerage and food and drug laboratories, the Bureau of Sanitary Engineering will install a field laboratory. A portable laboratory will be utilized in connection with a state wide milk survey in the near future.

*Public Health Education:* Exhibits, moving pictures at county fairs, weekly press service to five hundred papers throughout the state, with results checked by clipping bureau, are now being carried on.

## PENNSYLVANIA.

The Department of Health reports recent activities in sanitary engineering and child hygiene.

*Sanitary Engineering:* A plan is contemplated to protect the 100,000 industrial

workers in the large shipbuilding and munitions works on the Delaware River.

*Child Hygiene:* A plan is contemplated for attacking the general problem of improving child hygiene, which has been worked out on a rather elaborate scale with the Committee on Public Safety.

#### TENNESSEE.

The State Board of Health reports recent activities in vital statistics, laboratory, child hygiene, rural sanitation, and venereal diseases, but does not describe these activities.

#### TEXAS.

The State Board of Health reports recent activities in administration, vital statistics, and sanitary engineering.

*Administration:* The organization of a Bureau of Rural Sanitation. The activities of this bureau are devoted to rural districts, unincorporated towns and villages. The work is conducted simultaneously in five counties. The following is the personnel of the working force and the budget given each county: (1) Field director, annual salary, \$2,100; (2) Traveling expenses, \$800; (3) Health inspector, \$900; (4) Clerical, technical assistant, \$720; (5) Contingent fund, \$300; Total, \$4,820. Source of funds: State Board of Health, \$2,410; International Health Board, \$2,410; Total, \$4,820.

This budget is adopted by the counties with the following understanding: (1) That the counties securing same will make a supplementary appropriation of not less than \$200 each month for a period of four, eight, or twelve months. (2) That the funds appropriated by the counties shall be expended in employing local assistants.

The activities of each Field Unit is as follows: (1) Making sanitary surveys of the areas to be covered. (2) Examinations of the area's population for hookworm disease and other intestinal parasites. (3) Treating those shown to be infected

until cured. (4) Securing the erection of a privy that will prevent soil pollution at each home. (5) Giving free inoculation for typhoid and vaccinating for smallpox. (6) Examining the children in attendance at public schools for physical defects.

The work of each unit is supervised and directed by the Bureau of Rural Sanitation.

*Vital Statistics:* The passage of the Model Bill in 1917, which became effective in June of the same year, resulted in an increase of 29 per cent in deaths reported over the report of 1916, or 48 per cent increase over 1914; and a similar increase in births reported, of 11 per cent and 17 per cent. The bureau in operation, under this bill, is composed of a state registrar, deputy state registrar, chief filing clerk, and two stenographers.

The birth and death certificates are the forms recommended by the Federal Census Bureau, except Item 7 on the death certificate, to which has been added a subdivision for the purpose of securing data as to deaths among bottle fed babies. All certificates are carefully inspected, and date of receipt is stamped on reverse side. A record of complete and incomplete black and white with date of receipt is entered in a ledger upon which is based the voucher for fees due local registrars, and the birth and death rates of counties and municipalities. Correction slips are mailed physicians and undertakers. The data is tabulated and the certificates filed by counties and months. When the year's record is complete, the certificates are arranged for the State by the name of deceased, or child, and bound. The card index filing system has been abandoned, since it doubles the amount of work and documents to be filed, the number of filing cases to be bought, and permits a mistake to enter into the record, and cannot be made the basis of a certified copy, which is prima facie evidence.

*Sanitary Engineering:* River pollution

studies have been undertaken at various points in the state. The results of these investigations are reported to local authorities and it is expected that the sources of pollution will soon be removed.

The disposal of creamery wastes has been investigated. The waste is first treated in an Imhoff tank and then with a sand filter.

Studies have been made on the treatment of wastes from oil refineries and a successful method has been worked out for treating these wastes. The method consists of chemical treatment, sedimentation, filtration, and aeration.

Chemical and incinerator closets, ultra-violet ray treatment of water and the activated sludge treatment for sewage are subjects on which investigation work has been undertaken.

Railway water supplies have been investigated in compliance with the rulings of the United States Treasury Department. A systematic routine has been established for the field survey, the analytical work, and the reporting of results.

*Research:* See Sanitary Engineering.

#### UTAH.

The State Board of Health reports recent activities in a venereal disease program which has been recently adopted, but does not describe this work in detail.

#### VERMONT.

The State Board of Health reports recent activities in administration, laboratory, and research.

*Administration:* A rural dental clinic has recently been established. A dentist is employed who carries a complete portable outfit in a Ford car. Locations for his work are selected in communities remote from regular dentists and all work is done either at the schoolhouse or at some convenient place nearby. On account of the large field, only children between the ages of six and twelve are treated, but among

these children an effort is made to do complete work. The entire service is absolutely free and the consent of the parents to operate on their children has only been refused in one case out of about five hundred children. It has been found that prophylactic work is necessary in practically every case. Fillings average seven to eight per child, and extractions two to three per child. In connection with the operative work, an educational campaign is carried on with lectures, toothbrush drills, etc. Toothbrushes and tooth powder are furnished free to all children.

*Laboratory:* During the past year, type diagnosis of pneumonia has been undertaken and free anti-pneumococcic serum for Type I is furnished. A laboratory method has been evolved for obtaining diagnosis by direct examination of sputum without using white mice, and, by this method, a diagnosis can be completed in less than two hours. The results in almost every instance are verified by the regular method, using injections in white mice.

*Research:* Work has been undertaken on poliomyelitis.

#### WASHINGTON.

The Department of Health reports recent activities in vital statistics. The state has recently been checked up by the Census Bureau and has been admitted to the registration area for births. A nurse has been placed in the field, making house to house visits, trying to find babies whose births are not recorded.

#### WEST VIRGINIA.

The Public Health Council reports recent activities in sanitary engineering and venereal diseases.

*Sanitary Engineering:* A large amount of new work has been undertaken on water supplies in the state, especially in relation to water purification.

*Venereal Diseases:* Active steps have

been taken to control the venereal disease situation and regulations, covering the work, have been formulated and will be passed at a meeting on July 10th.

SUMMARY.

Twenty-eight states, territories, and provinces have reported recent advances in sanitary practice in the various subdivisions of health activities included in this report as shown in Table I. This health work, when arranged according to greatest amount of activity shown in each subdivi-

sion during the past year, assumes the following order: (1) venereal diseases, (2) administration, (3) child hygiene, (4) vital statistics, (5) communicable diseases, (6) sanitary engineering and laboratory, (7) public health education, (8) public health nursing, (9) research and, (10) industrial hygiene.

Committee:

- MR. H. A. WHITTAKER, *Chairman*
- DR. J. N. HURTY
- DR. E. G. WILLIAMS
- DR. CARROL FOX, *Consulting Member*

TABLE I. RECENT ADVANCES IN SANITARY PRACTICE IN UNITED STATES AND CANADA.

State, Territory or Provinces.	*A.	V. S.	C. D.	S. E.	L.	I. H.	C. H.	P. H. E.	P. H. N.	V. D.	R.	M.
Alberta.....	—											
Arizona.....	+											
California.....	—							+		+		
Connecticut.....	+	+	+	+	+			+	+	+		
Delaware.....										+		
District of Columbia.....			+		+							
Honolulu.....	+	+	+	+			+		+	+	+	+
Indiana.....	—						+			+	+	
Iowa.....		+	+					+		+	+	
Kansas.....		+		+			+	+	+	+		
Kentucky.....	+	+					+	+	+	+		
Louisiana.....		—	+		+	+				+	+	
Maine.....	+						+	+		+		
Massachusetts.....			+				+			+		
Michigan.....	+									+		
Minnesota.....	+		+	+						+		
Montana.....	+				+		+					
New Jersey.....		+	+	+	+		+	+	+	+	+	
New York.....	—	+	+	+	+		+	+	+	+		+
North Carolina.....	+	+	+		+		+		+	+		
Oklahoma.....	+	+	+		+			+				
Pennsylvania.....				+			+					
Tennessee.....		+			+		+			+		+
Texas.....	+	+		+							+	+
Utah.....										+		
Vermont.....					+							+
Washington.....		+								+		
West Virginia.....				+								
Total.....	17	13	11	10	10	1	14	8	7	19	5	5

\* A. = Administration.  
V. S. = Vital Statistics.  
C. D. = Communicable Diseases.  
S. E. = Sanitary Engineering.  
L. = Laboratory.  
I. H. = Industrial Hygiene.

C. H. = Child Hygiene.  
P. H. E. = Public Health Education.  
P. H. N. = Public Health Nursing.  
V. D. = Venereal Diseases.  
R. = Research.  
M. = Miscellaneous.

MR. WHITTAKER, *Minnesota*. You will note that certain states and provinces participated in an exhibit which can be seen at the back of the room. I also want to say that I shall be glad to make any corrections or additions in this report relative to the various states.

It was voted that the report of the Committee be accepted and placed on file.

### DISCUSSION.

DR. HICKEY, *Colorado*. I notice that Colorado is one of the states which failed to reply. I do not know whether this is the place to speak of it or not, but I would like to say that during the past year a good deal of activity has taken place in Colorado concerning the venereal situation, stimulated as you know by the urgent efforts of Surgeon General Blue. There was organized in our state a bureau of venereal diseases with an advisory committee appointed from members of the board whose business it was to set this department or bureau in operation. A special bacteriologist has been employed to assist in the diagnosis of syphilis and gonorrhea, and also in determination of the point when a cure has been effected. We are taking very active measures not only along these lines, but along educational lines to further this very important work. We have right at our door in Denver one of the army camp posts, and this has made it especially important that work of this sort should be pushed very energetically. In some other directions we have also instituted new activities and these will be reported to the Chairman of the Committee.

DR. BRISTOL, *Maine*. It may be well just to remind you that the State Board of Health which existed in Maine for some thirty years went out of existence last July, and its place has been taken by a state department of health with a Commissioner and Public Health Council. The department is made up of several divisions, including those of communicable diseases, vital statistics, diagnostic laboratories, sanitary engineering, education and publicity, and only last week a division of venereal diseases was created. The state has been divided into three health districts, and in charge of each district is a full-time district health officer. In other words, our state health work is now on an excellent footing so far as modern organization is concerned.

I like to compare organized public health work with the human body itself, which, I think you will all agree, is the greatest organism of which we have any knowledge.

The various structural units of the human body, as well as the functions of the same, may thus be compared with what is necessary in well organized public health work. The human organism consists of organs, tissues and cells. Analogous to the organism itself, in organized public health work we should have a federal health department. Analogous to the various human organs, should be efficient state departments of health, working harmoniously and reciprocally. Analogous to the tissues of the body, there should be strong district and county units in health work. Analogous to body cells, there should be active local boards of health.

From the standpoint of function we may compare the nervous system and a coordinating and stimulating federal department of health; the circulatory and respiratory system and the work of the state department of health; the muscular system and the local boards of health.—the bodies that actually have to do the hard work.

So far, I have left out of consideration the alimentary or digestive system. Analogous to that part of the human body, I would place this Conference itself. The chief function of this Conference should be to take in, and digest ideas for the benefit of the entire public health work of the country; to absorb what is useful and to throw off what is waste matter.

Up to the present time public health work in this country has had its greatest development in the work of the state department or board. We have developed our health "circulatory and respiratory" systems first in point of efficiency. What we most need at present is a better development in local boards of health; we need also greater development and organization in the higher lines of federal control of health work. In other words, we need more controlling and coordinating "brains" and "nerves" from the federal standpoint, and more force and action in our local communities.

In the state of Maine there are about 500 local boards of health, each made up of three members serving for terms of three years, and in the majority of instances, these boards do very little public health work.

A general reorganization of public health

work in this country is necessary, and I hope our Resolutions Committee will take before the President of the United States a definite plan—not glittering generalities, but a general plan as to what we desire in the way of a modern health organization in this country.

First of all, we must have sooner or later a federal department of health with a secretary in the President's Cabinet. To this end, the various health agencies now scattered among many federal departments, must be gathered together under one head. The United States Public Health Service should be taken from the Treasury Department, where it is now a bureau, and created as an initial structure for a new federal health department. The wonderful work which the Public Health Service has accomplished in the past, as a substitute for an independent federal health department, should entitle it to a large place in the new organization.

Such agencies as the division of hygiene of the Children's Bureau, the division of vital statistics of the Census Bureau, etc., should be taken from their respective departments and placed under a federal department of health.

Based upon the creation of a strong federal department the various local and state departments of health could be more easily built up and properly coordinated in their organization and functions. We wonder why public health work is not better recognized over the country. I feel certain it is because all these federal health agencies are so scattered that we have been unable to concentrate and show the people the exact value of well-organized health work.

In conclusion, I want to ask or suggest from the standpoint of Maine, that a committee of this Conference be appointed on what might be called board of health problems, or international health problems. We have, for instance, in the state of Maine, a large percentage of French Canadians coming into our lumber camps. In some parts of Canada they are absolutely opposed to vaccination. We are trying to compel our workers in lumber camps to be vaccinated. Some persons fear that if we do this a large number of French Canadians will refuse to work in our camps and the labor problem is acute enough as it is without doing anything further to upset this great lumber industry. A representative of our department had a conference with one of the officers of health of Quebec

and the latter agreed that something ought to be done to standardize the requirements in Canada and in the border states that are most affected in this matter: so that, for instance, the province of Quebec would have the same standard for requiring the vaccination of that great class of workers in the lumber camps as the state of Maine. This is only one of many illustrations which might be cited to show the kind of standardization work which such a committee might accomplish.

It was voted that a committee be appointed to consider and report upon the subject of international border health problems.

DR. BEATTY, *Utah*. In the report of the Committee no mention was made of an activity in Utah operative for several years past which has proved most efficient in the betterment of sanitary conditions. It is in the nature of a state-wide sanitary competition participated in by all of the incorporated towns in the state. The towns are classified according to population and scored, each in its class. The scoring is done on a basis of 100, covering the water supply, sewage disposal, disposal of garbage, condition of corrals and various other matters concerned in the sanitary condition and beautification of the town.

The contest begins early in the year and the field inspectors are sent out during the season to stimulate activities, and at the close of the contest are sent into the field for the purpose of scoring the towns. As I said before it has proved very efficient, not only in improving the sanitary efficiency of the various communities, but also from an educational standpoint. The people have been impressed more with the importance of this kind of work than ever before. Moreover, the rivalry that is brought about is very useful. Communities have become ashamed of remaining down in the 20's and 30's. The lowest score of any town so far has been 20 and we think in that particular instance the inspector was magnanimous. I passed through there later on a follow-up visit and told them their town had been referred to by Dr. Evans, employed by the *Chicago Tribune* to instruct people on sanitary subjects. In an article speaking of this movement he said if you are going to Utah to live, steer clear of Marysville but rather set your eyes towards Manti, with the high score for the state of 72.



This movement is one that can be recommended to all states as very effective in awakening the people to an interest in health activities. I shall not attempt to give all the details of such a contest as they have been developed in Utah. At the end of the season the result of the scoring is published and a great deal of interest is taken in it.

DR. TUTTLE, *Washington*. I don't want to discuss this subject, but to introduce a motion. After hearing this report I realize why Mr. Whittaker looks as though he had been put through a meat grinder. I move that a vote of thanks be extended to the Committee for the excellent presentation of the subject matter of this report.

Dr. Tuttle's motion was seconded and carried.

#### REPORT OF COMMITTEE ON COURSES OF STUDY IN PUBLIC HEALTH AND SANITARY MATTERS.

DR. SIPPY, *Kansas*. Dr. Crumblin, the Chairman of the Committee, directs me to say the work of the Committee has been completed and recommends that the Committee be discharged. A report was made last year and an outline for study for women's clubs was presented. I may say that in our state the women's clubs are becoming less well acquainted with Browning and Shakespeare, and better acquainted with the sanitation of the home.

Accordingly it was voted that the report of the Committee be accepted and the Committee discharged.

#### PRELIMINARY REPORT OF THE COMMITTEE ON SANITARY POLICY UNDER WAR CONDITIONS.

PRESENTED BY DR. JAMES A. HAYNE,  
*Secretary, South Carolina State Board of  
Health, Chairman.*

The more I think of the title of this Committee, the more I am impressed with the fact that you are very unfortunate in the choice of a chairman for that Committee. The policy of the state boards of health in time of war cannot differ materially from the policy of state boards of health in time of peace, namely to make

the public as healthy as possible, to make conditions as healthful as possible. That is what we are concerned with today, and under war conditions I cannot see how their policy can be materially changed. If by the "policy" is meant what is going to be our relation to the Army, Navy and Public Health Service or whatever other authority may be constituted over us, possibly we can make a report on it, but so far we have had no data from the government as to what its intentions or its policy will be towards state boards of health, and we would like to have some expression of opinion or policy from the government and then possibly our Committee could report on what would be our policy towards the policy of the government, and ours will be a policy of coöperation. But we would like to have it communicated to us in what way we are to bring our forces to help the forces of the government.

In view of this fact and in view of the fact that the Committee has not yet met, I should like to ask that the report be made a special order of business tomorrow at eleven o'clock, immediately after the special order of business which we have set for the Kahn-Chamberlain bill, and I would like to ask someone to make this motion.

It was voted that the report of this Committee be made a special order of business for tomorrow morning immediately following the Kahn-Chamberlain bill.

(See also page 105)

#### REPORT OF THE COMMITTEE ON PELLAGRA.

PRESENTED BY DR. J. A. HAYNE,  
*Secretary of the South Carolina State Board  
of Health, Chairman.*

The only report I have to make is that pellagra still exists in my state, but there is a rapidly diminishing number of cases. It has decreased in the last three years

from 1,900 to 600 deaths, but as the war conditions are such that we don't get a chance to get nearly as well-balanced a ration as we did before the war, I suppose that the number of cases will increase. So far, this has not taken place, but it is very probable that if a lack of a properly balanced ration is a cause of pellagra, we will have an increasing number of cases in the state.

I do not attribute the decrease in the number of cases in South Carolina to any propaganda that has been sent out by the State Board of Health as to the proper kind of food we should eat, but I do attribute the decline in the number of deaths to the fact that we have been able, through the activities of the Public Health Service to whom we owe a great debt of gratitude, to give the physicians in the state instruction as to the proper method of treatment of pellagra, which is notably a dietetic treatment, and to stop the use of arsenic. This has resulted in a greatly decreased death rate.

As regards the morbidity of the disease, we have no accurate method of determining whether the morbidity is on the increase or decrease, but we do know that the death rate is greatly on the decrease.

I would like to ask that the Committee be discharged.

### DISCUSSION.

DR. FRANTZ, *Delaware*: Pellagra being quite a prevalent disease and the fact that conditions affecting it are changing, I think this Committee should be continued in order that we may have a further report next year to see if the war ration has any effect on the morbidity or mortality of this disease.

Accordingly, it was voted that the report of the Committee on Pellagra be accepted and the Committee continued.

### REPORT OF COMMITTEE ON TERMINAL DISINFECTION.

PRESENTED BY CHARLES F. DALTON, M. D.,  
*Secretary, Vermont State Board of  
Health, Chairman.*

DR. DALTON: Your Committee has tried to keep track of anything going on with reference to terminal disinfection, but unfortunately there has not been anything going on. It is either a dead subject entirely, or else those who did believe in it have stopped talking about it. Consequently we have but little to report.

The committee on terminal disinfection is not familiar with any development of the past year which should lead to any change in the recommendations made at the last annual meeting.

It is interesting to note that in the Medical War Manual, No. 1, Vedder mentions smallpox as one of the diseases following which terminal disinfection may be desirable. This disease and tuberculosis were mentioned by your committee at the last meeting as those following which it is safer to disinfect. Vaccination against smallpox should always be carried out in addition to any other precautionary measures.

Cerebrospinal fever has attracted so much attention by reason of its prevalence in our military camps and in some civilian communities that a specific recommendation in connection with it may not be out of place.

Your committee believes that after a case of meningitis becomes convalescent the effects of the patient, and his surroundings, are free from danger of conveying infection. When the patient has died any effects soiled by nasal or oral discharges should be disinfected by boiling or by an appropriate solution, though it is probable that the infection does not survive long outside the body.

We are fortunate in having Dr. McCoy as our consulting member and with his advice we are taking a rather conservative stand in this matter instead of being entirely radical as some of you possibly might desire to be. We are

frank to say that we are perfectly willing to have our recommendations changed if the Conference so desires. However, it seems to me that the subject has been so nearly settled I am inclined to think that this Committee may perhaps now be discharged.

### DISCUSSION.

DR. HAYNE, *South Carolina*: I cannot possibly see the use of terminal disinfection in cases of cerebrospinal meningitis. The organism is so short-lived we can hardly carry it with the best media we can get. Why should we disinfect what we cannot keep alive when we want to keep it alive.

DR. BRACKEN, *Minnesota*: I am glad to hear Dr. Hayne say that. I think we should take care of the patients and the things connected with them; if we do that there is no need of terminal disinfection for anything. As for advocating terminal disinfection after smallpox; that is the limit. People do not have to have smallpox—we know that vaccination and vaccination only, will control it. Why should we hold out to the people that terminal disinfection has anything to do with protection against smallpox? Let us do away with terminal disinfection entirely.

DR. KELLOGG, *California*: I would like to ask Dr. Dalton if the experiments he mentions on the value of the different disinfectants had to do with the organism of cerebrospinal meningitis, and if not, I can only say that anyone who has ever had any actual experience with this organism certainly cannot have a very high regard for the necessity of any disinfective measures.

DR. FRANTZ, *Delaware*: I cannot agree with my friend from Minnesota on the absolute uselessness of terminal disinfection. If our patients did destroy the infection as they produced it, it would be all right. Take scarlet fever patients for instance, you do not allow them to send their letters through the mail until they have been disinfected, nor to use books which will be handled by others. I cannot agree with the theory of no disinfection at all.

There are some diseases after which I don't believe it does a great deal of good, but to discontinue it entirely, not only because of the effect it has upon the patient but upon the actual germs not killed by the patient and nurse, I

believe terminal disinfection should be continued at least in some diseases.

DR. WILLIAMS, *Virginia*: I would like to ask Dr. Frantz if he can produce any evidence to show that the germs of scarlet fever can be carried on books or papers.

DR. FRANTZ, *Delaware*: I am like the old lady down in the hamlet. I cannot tell you exactly why, but it is so. You have not got the germ of scarlet fever yet and until you get him you cannot tell what he is like.

DR. SMITH, *Minnesota*: As an argument against terminal disinfection particularly in the case of scarlet fever, may I quote to you an experience we have had in St. Paul within the last two years in the release from quarantine of scarlet fever on negative cultures from the nose and throat, negative for streptococci. When we started we had no definite knowledge as to the particular streptococcus we thought was the causative agent. We were satisfied that if a person's throat was free from the streptococci that person could not transmit the disease.

With this in mind we cultured our scarlet fever patients for a period of some months. Unfortunately for us there was no marked epidemic and the cases were mild. We had no very large numbers. We cultured the patients and as soon as they were free from streptococci we released them, on two negative cultures. Our return cases were no more numerous than after other methods. Out of the series we had one return case. We had had about 2 to 3 per cent returned cases by release upon the cessation of desquamation. We also thought we were the first to release in that way, negative from streptococci. We saw no reason for carrying on our quarantine after the patient was free from streptococci. We thought the thing to do was to watch our cases in the hospital, and that the causative agent was in the secretions of the nose and throat. If they were destroyed at the bedside we had done all we could. If they were no longer present in the nose and throat the patient was ready for release.

I think if this method can be followed up, cooperating with the bacteriologist and epidemiologist, it will be found to be as reliable as the method we now use for controlling diphtheria.

DR. BEATTY, *Utah*: I would like to ask what the average time of quarantine was?

DR. SMITH, *Minnesota*: There is very little difference between the length of time of quarantine of the old method and this. The period is about 28 or 30 days.

Q. When do you culture?

A. Just as soon as we get them and we find in the throats the streptococcus.

Q. What was the average length of time you found the streptococci about 30 days?

A. Yes.

DR. DALTON, *Vermont*. What was the longest time?

A. About six weeks, a little over, I think.

DR. WILLIAMS, *Virginia*: Do you get many carriers?

A. Yes, chiefly in the family in which a case has occurred and people who are not sick themselves.

DR. BEATTY, *Utah*: Do you culture discharging ears?

A. No, we have not had any.

DR. WILLIAMS, *Virginia*: You have not used anything like the Schick test?

A. No, we are simply feeling around to find what we can do by cultural methods.

DR. DALTON, *Vermont*: Under what conditions did you keep your carriers?

A. They were free; we had no method for holding them.

DR. NICOLL, *New York*: I frankly confess I don't just know what you are talking about. What do you mean by terminal disinfection?

DR. DALTON, *Vermont*: Gaseous infection. This refers to the report which the Committee made last year.

DR. NICOLL, *New York*: This does not include the boiling of dishes, bedclothes, etc?

DR. DALTON, *Vermont*. No, we are agreed on that point, I think.

DR. NICOLLS, *New York*: I should say in regard to the streptococcus that I should hate to see it placed on the record as a basis for discharging scarlet fever. I don't think there is a man in this room who would dare to turn loose a discharging ear from scarlet fever on the public on the basis of a negative streptococcus culture or any other sort of culture. If he does he takes a responsibility I would not care to assume, and so far as streptococci is concerned, we know altogether too little to assume any such automatic basis for the discharge from

quarantine. I should like very much to have Dr. Cole's opinion on this subject.

DR. COLE, *New York*: This year we have been studying the relationship of streptococcus to pneumonia and have made a considerable number of cultures from normal throats and from throats of patients suffering from pneumonia. In our experience streptococci can be found in almost any throat, but the frequency with which hemolytic streptococci is found varies under different conditions. In certain of the camps we have found hemolytic streptococci, in distinction from streptococci, in as many as 80 per cent of the men. In certain studies made at the base hospital at Camp Sam Houston we found 11 per cent of the measles patients on admission to the hospital carried these streptococci in their throats. In tests made in one of the dispensaries in New York only about  $\frac{1}{2}$  of 1 per cent of the patients applying for treatment were found to carry hemolytic streptococci. In studies carried on in the Army Medical School only about 1 per cent of the men were carriers. There is no question but that hemolytic streptococci do occur in normal throats, and during epidemics may be present in a considerable number of individuals, so that it would seem very dangerous to assume that a person carrying hemolytic streptococci was dangerous to the community for fear he might distribute scarlet fever.

DR. ROYER, *Pennsylvania*: Dr. Smith's observation is interesting if it will run true in practice. I know too little about streptococci to say they bear no particular relationship to scarlet fever and have seen streptococci proven to be the cause by other workers. The fact that cultures were negative to streptococci about thirty days after the onset of scarlet fever is not of much importance, particularly when dealing with the mild type of the disease with no ear complications, such as Dr. Smith describes. I certainly agree with Dr. Nicoll's remarks about the discharging ear. I should in no case feel safe in releasing a scarlet fever patient with a nasal or ear discharge under the fourth week, because I have too often in discharging such cases from the hospital seen returned secondary cases in the home.

DR. SUMNER, *Iowa*: There is nothing in the world so excellent as an illustrative example

and I am just calling to mind two very interesting incidents. One was in a house on Commercial Street, Sioux City. A man who was a contractor moved into this house and a short time afterwards began to remodel the house, tearing off wall paper, etc. He had three children. Everyone of them took scarlet fever during this process of repairing that house. A careful search of the records at City Hall showed that scarlet fever had been in that house nine months before these cases occurred.

The second incident occurred in a family which received a box of clothing from Germany. That was several years ago. Shortly after the box was received, smallpox broke out in the family. I was not the attending physician but the case was reported to me as health officer. I don't know whether the proper care had been exercised prior to the release of these primary cases, or whether terminal disinfection should have been used in order to prevent the spread of these diseases. These cases are on record and can be shown. I am not sure whether we can always trust the public to do everything we tell them to do. If they do, then we have acquired a great help in limiting the spread of communicable diseases.

DR. TUTTLE, *Washington*: I know we sometimes use the term fumigation and sometimes disinfection. I would like to ask the Chairman if his recommendations tend to fumigation in the sense of burning incense to the gods, or disinfection by boiling water and scrubbing brush?

DR. DALTON, *Vermont*: I think this discussion has ably demonstrated that the subject of disinfection is a good deal like that of alcohol. You can discuss it from every side and get authority to support anything. That is why the Committee has been conservative in its recommendations.

In regard to some of the questions that have arisen: In the matter of the growth or transportation of the organism of cerebrospinal meningitis. Of course every one knows this to be a short-lived organism, but I call your attention to the fact that it is often hard to transport and use the typhoid fever organism, and we know that typhoid does develop even if we cannot find it. This is a somewhat analogous case.

In regard to Dr. Smith's illustrations, I am sure that I do not care to say that scarlet fever could not have been found in that house nine

months after a case, but I should be inclined to think that the patient coming down with scarlet fever had run into a carrier rather than getting it from the house. In regard to the smallpox from Germany, of course we can get anything from there, but before I accepted that evidence as conclusive I should want to know if there had been any chickenpox in that vicinity.

If you will please notice the recommendations made by this Committee you will see that they are entirely confined to cases which die or are removed during the acute stage of the disease. That is, the report does not refer to those cases which go on to convalescence. In these cases we assume, as practically everyone does, that if disinfection has been carried on during the time of the illness that the danger is practically removed and that incense to the gods, as Dr. Tuttle calls it, does no good. But if a person dies or is removed during the acute stage of the disease we believe there is some chance of doing good by disinfection and by this term I mean aerial fumigation. It should be accompanied with soap and water cleaning.

I don't know that I have anything more to add to this report. As I have said, this is a much argued question and I suppose it will always be. Whether this Committee or any other will be able to reach conclusions which will be acceptable to the whole Conference I very seriously doubt. I should welcome the suggestion that this Committee be temporarily discontinued and brought into being again at some future time when the atmosphere has clarified somewhat.

DR. BEATTY, *Utah*: With reference to the statement as to smallpox disinfection, if we go on record here as recommending that that be recognized as a measure of prevention we place ourselves in a false position in view of the opinion we have that the only preventive of smallpox is vaccination. This report deals with the efficiency of terminal disinfection and I think it should be made evident that this Conference does not recommend terminal disinfection as a measure for the prevention of smallpox.

DR. DALTON, *Vermont*: I should like to add that to the report.

It was voted that the report of the Committee on Terminal Disinfection be accepted and placed on file and the committee temporarily discontinued.

## PNEUMONIA IN THE ARMY.

RUFUS I. COLE, M. D.,

*Rockefeller Institute, New York.*

A YEAR ago I had the honor of addressing this Conference on the subject of pneumonia, and in my remarks I confined myself to the subject of acute lobar pneumonia due to pneumococci and to its prevention and serum treatment. In the year that has elapsed since then certain events have occurred that are of great importance, not only to the health of the army, but which threaten the health of the civilian population as well. The events to which I allude are the widespread epidemic occurrence of measles among the soldiers and, concurrently with this, the occurrence of a very large number of cases of pneumonia due to streptococci.

Last autumn in the hospital of the Rockefeller Institute, where many of the patients admitted for pneumonia were soldiers from the camps near the city, we began to have an occasional case of pneumonia in which the etiologic agents, as shown by the sputum examination, and, in certain cases, by the bacteriologic study of autopsy material as well, were not pneumococci but streptococci. We also began to have reports from the laboratory workers in certain camps, where pneumonia was prevailing to an alarming extent, that difficulty was being encountered in determining the type of pneumococcus present in many of the cases. From certain camps reports were made that an extraordinarily large number of the cases were due to pneumococci, Type IV. Since, as you know, the determination of this type of infection is made largely by exclusion, and since the pneumonia in the camps was accompanied by a very high mortality rate, which did not agree with our previous experience with pneumonia due to this type of pneumococcus, we became suspicious that some

other infectious agent was probably responsible for many of the cases which were occurring. This view was confirmed, by the observations made by Captain Zinsser at Camp Wheeler in Georgia, that many of the cases there were due to streptococci, and by the observations of Captain Dochez at Camp Bowie in Texas that a large number of the cases there were due to hæmolytic streptococci. Early in February, a group of men including Professor MacCallum of Johns Hopkins, Dr. Dochez, Dr. Avery and myself were sent by the Surgeon-General of the army to Fort Sam Houston, Texas, for the purpose of investigating the nature of the pneumonia prevailing there.

As a result of that study it was determined that in this hospital there existed two kinds of pneumonia. First, there were cases of acute lobar pneumonia, which differed in no way from the cases of acute lobar pneumonia with which we were familiar, except possibly in the low mortality. This, of course, could be expected in a group of young, strong adults, such as soldiers. In the cases of this variety, which we studied, there occurred an unusually large percentage due to Type I pneumococci, but this was probably not of great significance since the cases studied were not taken consecutively on admission.

Second, in addition to these cases, there occurred a large number of cases of pneumonia which differed pathologically from the others, the lungs showing not the diffuse lesions of lobar pneumonia but scattered small areas of broncho-pneumonia. These lesions were very carefully studied and described by Dr. MacCallum. I cannot go into this matter fully, but may say that in most cases the individual foci were

quite characteristic and that macroscopically they frequently resembled military tubercles. Indeed there can be no doubt that in the past these lesions have not infrequently been mistaken for tubercles. Microscopically each focus was found to consist of a central bronchus filled with pus, with the surrounding alveoli showing more or less exudate, the cellular contents tending, however, to be mononuclear cells. The bronchial walls and the inter-alveolar septa showed very marked thickening and infiltration. This new growth of tissue was seen even in cases in which the disease had lasted only a week or ten days. To this peculiar form of pneumonia, Dr. MacCallum has given the name of interstitial broncho-pneumonia as being most descriptive. Similar lesions have been described by others, especially Hecht, Bartels, Steinhaus and Delafield, usually in the pneumonia associated with measles in children. In all these cases hæmolytic streptococci were found by us to be present in the lung lesions and in a few cases they were present in the blood, only however a short time before death. There can be little doubt, therefore, that the agent responsible for this condition is this hæmolytic streptococcus. These cases also showed fairly characteristic clinical symptoms, the patients having very marked respiratory distress, with very labored inspiration and marked cyanosis. In most cases the patients were very bright and alert but extremely anxious. A very large number of these cases were complicated by empyema. The mortality in these cases was very high; in certain groups of cases complicated by empyema the mortality was as high as 75 to 80 per cent.

In most of these characteristic cases there was a history of preceding measles, but in a few of them no history of measles could be obtained. In addition to these cases, there also occurred cases in which both acute lobar pneumonia and the disease

I have described were present in the same individual. This was established by the presence of both kinds of lesions in the same patient at autopsy and by the bacteriologic demonstration of streptococci and pneumococci either coincidentally or at different times in the same patient. It was not easy in all cases to determine which had been the primary infection, that with pneumococci or the streptococcal infection. Enough evidence, however, was obtained to indicate strongly that patients with acute lobar pneumonia are susceptible to infection with streptococci and that this infection may change a relatively mild disease into one of extreme seriousness. Other reports of a somewhat similar state of affairs have been made from other camps, notably Camp Custer by Irons and Marine and from Camp Zachary Taylor by Hamburger and Alexander.

It is now quite certain that pneumonia due to streptococcus hæmolyticus has been widely prevalent in the camps and that, while many cases have undoubtedly followed measles, many cases have occurred independently of this disease. Dr. MacCallum has just returned from studying an epidemic of pneumonia at Camp Dodge near Des Moines, Iowa. Here, the same type of streptococcus pneumonia largely prevailed.

Owing to the difficulties of the bacteriological examination which is required, many of the cases of pneumonia in the various camps have not been differentiated, and we shall probably never know just what proportion of the cases of pneumonia in the army during this past year has been of this variety, and to what extent the great loss of life has been due to this streptococcus infection. From my own experience, however, I suspect that somewhat more than half the cases and probably three-fourths of the deaths have been due to this disease. Of very serious import is the fact that this type of disease still prevails, and it is not yet certain to

what degree it will be decreased by the warmer weather. The significance of this disease, moreover, is not limited to its importance as an army disease. On my return to New York from Texas, I was astonished to find that a considerable number of cases of streptococcus pneumonia had been admitted to the hospital during my absence, and we are still having such cases. Of 247 cases treated in the hospital of the Rockefeller Institute since October first last, 38 have been of this type. A large number of these cases have occurred in soldiers, but a considerable number have been from the civilian population. In some instances women suffering from this infection and admitted from the crowded districts of New York City, have given no history of measles, nor could any history of association with soldiers be obtained. Beginning, therefore, as a disease of soldiers, apparently secondary to measles, it has apparently spread to soldiers suffering from other infectious diseases, such as lobar pneumonia, then healthy soldiers have been attacked, and finally it has spread to civilians. While it is not wise to theorize too far, a probable course of events seems to be that these organisms have affected first the measles cases in whom the bronchial mucous membranes and the lung tissues are especially susceptible to streptococcus infections, and that the bacteria have thus, by repeated transfer, had their virulence for man so enhanced that they now are able to affect healthy individuals and infection is becoming widespread. If this is true, it is obvious that this type of infection may at any time become a very serious menace to the civilian population. It is too soon to have any statistics concerning this matter, but conversations with other hospital physicians have convinced me that this type of pneumonia is becoming quite common, at least in New York.

I am reminded of a statement made be-

fore this conference last year by Assistant Surgeon General Rucker which I should like to quote:

"We must realize that in this war there is bound to be an interchange and cross-interchange of infections between the civil and military bodies, and between the military and civil bodies. Therefore, it behooves us who are in charge of the health agencies in this country to see to it that our work is done with an unusual degree of care and thoroughness."

It seems to me that this prophecy is already being realized, and that this streptococcus lung infection is one that the State and Provincial Health Boards cannot afford to overlook. History has shown that all great wars have been followed by plagues among the civilian population. It is not at all impossible that this is the plague to follow this great war.

It is too soon to indicate exactly what steps should be taken to prevent this. It is to be hoped that the investigations now being carried out under the supervision of the army will be of value in this direction. In any case, to be forewarned is to be forearmed. One thing that should be undertaken is the instruction of physicians in civil life in the methods of recognition of this disease. Efforts should also be made to determine its frequency in the various communities. In districts where the diagnostic laboratories have been organized to make the etiologic diagnoses of types in cases of lobar pneumonia, this same organization will be found to be of great value in detecting these cases.

It is to be hoped that in the presence of this added complication to the pneumonia problem, the efforts which have been undertaken to lessen the incidence of and mortality from acute lobar pneumonia will not be diminished or stopped. Among civilian populations, so far as can be determined, there has been no decrease in typical lobar pneumonia during the past



winter. Nor has there been a lessening in mortality. Whether the occurrence of lobar pneumonia in the camps has been accompanied by any increased frequency of this disease in the cities adjacent to the camps cannot be determined until the statistics have been collected and analyzed.

The occurrence of the war is going to make it very difficult to determine whether the measures to limit this disease, which have already been undertaken by certain cities as Chicago, and by certain states as New York and Massachusetts, have resulted in any benefit or not. In any case, it is too soon to expect any marked effect. I have no reason, however, to change any of the recommendations made before this conference last year.

The occurrence of the streptococcus pneumonia in the camps has interfered very markedly with the collection of further information concerning the effectiveness of anti-pneumococcal serum, Type I. Large amounts of serum have not been available. In certain camps the laboratories have not been sufficiently well organized to make routine etiologic diagnosis possible, and in some camps serum has been administered to every case of pneumonia without reference to the type of infection. Of course, from the results of such procedure no conclusions can be drawn. In other camps, notably at Upton, where the facilities for diagnosis and treatment were good, the results of serum treatment have been excellent. Our own experience has continued to be most favorable. Our total mortality in the cases of lobar pneumonia admitted to the hospital of the Rockefeller Institute this year has been low, only 21 per cent. This is undoubtedly due in part to the large number of our patients who were soldiers and therefore of a favorable age. Our mortality in the sixty Type I cases treated with serum has been 11 per cent, a little higher than our previous record, but still most satisfactory. I

was away a considerable part of the winter and have not yet been able to analyze these cases carefully.

A decided step forward in the serum treatment of this type of pneumonia has been made by the establishment of a definite standard of potency of the serum by the New York State Board of Health. All anti-pneumococcus serum which is sold in the state of New York must now conform to this standard, and these requirements have been made a part of the sanitary code of that state. I feel that it is most important that some similar standard should be established by the Public Health Service for the Federal Government.

Certain steps have been taken toward the introduction of prophylactic vaccination against lobar pneumonia in the army. Drs. Austin and Cecil working at the Rockefeller Institute and at Camp Upton have prepared a vaccine against Types I, II, and III, pneumococci, and, following preliminary tests on a series of physicians and volunteers, have proceeded to inoculate about 12,000 enlisted men. Pneumonia was prevailing at the camp at the time. The inoculated men only remained at the camp a little over two months following the inoculations when they were transferred overseas. As far as can be judged from observations made during this short period, however, the results were most satisfactory. Not a single case of pneumonia occurred which was due to the types of pneumococci used for inoculation, while a considerable number of cases occurred among the men not inoculated. A disturbing fact, however, and one which at first sight seems to throw some doubt on the importance of the results, is the fact that among the inoculated men the incidence of streptococcus pneumonia was also much lower than among the uninoculated. If, however, the streptococcus infections chiefly occur in the cases

suffering from lobar pneumonia (aside from the measles cases), we have an explanation of this lowered incidence of streptococcus pneumonia amongst the inoculated. I think it important, however, that until more time has elapsed, too much stress should not be laid upon these observations. Taken in connection with the results obtained by Lister in South Africa, however, they are encouraging and justify a further trial of the method in the army, and this will undoubtedly be made in the near future.

In conclusion I may say that while the fact that new complications have arisen in the subject of acute pulmonary affections is discouraging, it only emphasizes the great need for more intensive study and consideration of this group of diseases by public health officials. We must recognize that we are dealing with a group of diseases and that etiologic differentiation is essential in preventive medicine. In the past fifty years the etiologic differentiation of acute intestinal diseases has been made possible, hygienic methods for preventing the transfer of infection from these cases have been perfected. It now remains to differentiate and recognize the different acute pulmonary infections, to learn more about how infection is spread from these cases and to establish a rational hygiene that will prevent this distribution.

## REPORT OF THE COMMITTEE ON PNEUMONIA.

PRESENTED BY DR. JOHN S. HITCHCOCK  
*Director of Communicable Diseases, State  
Department of Health of Massachusetts.*

As a preliminary to this report, a short questionnaire was sent to provinces, states, and municipalities known to be making use of anti-pneumococcic sera in a public health sense and maintaining their own diagnostic laboratories. This covered general questions as to the source of the

sera, the cost, the amount distributed, the number of cases it had been used in, the results and under what restrictions as to its use. From the diagnostic standpoint it covered the number of each type of cocci found. The answers received on the diagnostic question were quite satisfactory and follow:

	No.	I	II	III	IV	Unsatis- factory
Buffalo.....	156	35	42	31	48	
New York City..	240	69	56	27	88	
Rochester.....	170	37	24	26	83	61
Massachusetts..	398	58	72	46	222	120*
New York State	334	115	57	43	119	138
Vermont.....	23	0	2	6	15	10
	1,321	314	253	179	575	329
	23.7%	19.1%	13.5%	43.3%		

\*25 were streptococcus type

The greatest variation from this average is shown in Massachusetts where 8.5 per cent less of Type I and 12.3 per cent more of Type IV were found.

The answers to the other portions of the questionnaire were less satisfactory; many sins of omission were noted. The summary of the answers received follows:

*Source of serum:* Massachusetts, New York State and New York City make their own sera and New York State supplies her cities outside of Manhattan.

*Cost, estimated:*

Massachusetts, \$3.50 per 100 cc.

New York City, \$2.00 per 100 cc.

No other replies

*Amount distributed:*

Massachusetts—

I. 50950 cc.

II. 28700 cc.

New York State—

I. 133500 cc.

Diagnostic

I. 15370 cc.

II. 29295 cc.

III. 27320 cc.

New York City—Approximately 150 to 200 doses of 100 cc. each during the pneumonia season.

*The number of cases in which it had been used is undetermined by reason of lack of time to gather and examine statistics.*

Buffalo—Reports 22 cases.

Massachusetts—Reports 41 cases in which good records were kept and an unknown number in which they were not so recorded.

New York City—Not known.

New York State—Statistics not complete—certainly between 200 and 300 cases.

Rochester—Reports 29 cases.

It is often very difficult to get complete records kept or compiled by either physicians or institutions.

*Restrictions as to use:*

Massachusetts—After determination of type at State Laboratory, the serum may be secured and administered by any physician, provided the department is satisfied he is competent.

New York City—"Unless cases severe, physicians requested to have type determined prior to administration."

New York State—Type I must be determined in certain designated laboratories throughout the state, about ten in number. Administration only by designated qualified operators.

Vermont—"Must be administered in a hospital."

*Results of serum therapy:*

No immediate fatalities were reported.

Fifteen cases were reported which proved fatal later from various causes, empyema being the most frequent.

In Massachusetts, the treatment seemed to have excellent results but there were not a sufficient number of cases reported to be of statistical value.

New York State reported that the first statistics gathered showed a mortality of over 40 per cent in treated cases. This was shown to be largely due to the fact that physicians were unfamiliar with the treatment and gave ridiculously inadequate doses. Just recently at Camp Wheeler, in a series of 72 cases treated with the New York State serum the mortality was 2.8 per cent. Previously, on the Mexican border, Craig, using partly this serum and partly a serum of unknown potency, reduced the mortality to 7.7 per cent.

The Rockefeller Institute reports a mortality of 21 per cent in untreated and of 11 per cent in treated cases.

New York City reported "results variable."

demonstrated that the diagnosis of type and the serum therapy of the disease can be established as a state enterprise. Whether it is wise or not to do so in a given state or whether or not serum should be manufactured by the state or purchased, is a local question. That serum treatment, if properly and promptly instituted lowers the death rate in this disease, has been conclusively proven.

*Second.* Such statistics and statements of results as we have been able to consult covering the treatment of cases, especially in the early stages, in a state wide organization against this disease seem to show that these statistics are apt to be unreliable. Delays in service and the reluctance of the average physician to institute this treatment until the prognosis in the case becomes unfavorable seem to be responsible for this. On the contrary, however, in well equipped hospitals and institutions and in military organizations, results suggest a varying but well marked lowering of the death rate when serums potent against Type I cocci are used.

*Third.* Your committee recommend that the potency of each package of serum should be as distinctly stated as is the case with diphtheria antitoxin and that each package, whether offered for sale or for free distribution, should carry a definite statement of its potency as determined by some standardized method.

## DISCUSSION.

DR. WILLIAMS, *Virginia*: Do you find many carriers? About what percentage?

DR. COLE: The number of healthy carriers of haemolytic streptococci undoubtedly varies under different conditions. Observers who have studied this question in the past have concluded that haemolytic streptococci are found but rarely in normal throats. The observations so far made in the camps have shown that in some camps a considerable number of healthy carriers were present; in other camps few or no carriers were found. The number of healthy carriers at any

The answers to this questionnaire plainly demonstrate that the use of the serum is still in an experimental stage and that many desirable data as to its use and results are still unobtainable. From what data could be obtained from this questionnaire and from what other sources were at their command, your committee would report:

*First.* The states of Massachusetts, after about one year's experience, and New York, after three years' experience, have

time undoubtedly bears a direct relationship to the prevalence of the disease.

In the study of the carrier problem, and indeed in the whole epidemiological study of this disease, it is of fundamental importance that the characteristics of the streptococci causing the disease be clearly recognized in order that these streptococci may be differentiated from those which are non-pathogenic for man. On account of the importance of this matter, a conference of men who have worked on this question was held last Saturday at Princeton, at which a full discussion regarding the classification of streptococci occurred. The results of this conference will later be published by the Surgeon-General's office.

Most of the streptococci which we and others have found in the throats of patients with pneumonia, and those which have been found in the throats of persons whom we have regarded as carriers, have corresponded in their morphological and cultural characters with the type described as *streptococcus pyogenes*. Whether these organisms are all immunologically identical is not certain. This is at present a very important matter to determine. Such knowledge is essential before any rational method of serum therapy can be developed.

DR. NICOLL, *New York*: I want to give a word of warning to those of you who may be inclined to follow the example of Massachusetts and New York in providing for the distribution of anti-pneumococcic serum: Do not place too much confidence in the general practitioner's or average health officer's ability to administer it properly. I have just learned that Massachusetts requires a reasonable assurance that a physician can give serum. I don't know just what that means. It requires experience and suitable apparatus to get the serum into the vein, to keep it at body temperature, and regulate the flow according to the condition of the patient. If you provide such a serum you must be very careful to whom it is distributed. Otherwise you are going to bring discredit upon this undoubtedly useful therapeutic agent, and endanger life rather than save it. I realize that it is difficult to refuse the request for serum, made by a reputable practitioner—nevertheless it should be done, unless there is definite knowledge of his ability to make use of it properly.

DR. DARTON, *Vermont*: I would like to say a

word about the potency of this serum. In Vermont we do not manufacture this serum. When we decided to take up this matter we were at once confronted with the question of where to get the serum. It was obviously impossible for a small state to manufacture it. Very fortunately we had the advice of the Rockefeller Institute and through them we did obtain some commercial serum, but only after it had been tested out by the Rockefeller people. For the benefit of any who are thinking of getting into this sort of work I should like to have Dr. Cole say a word about the commercial sera on the market at the present time. I think it would be well to call to mind the necessity of an anaphylactic test before administering the large amount of serum necessary.

DR. BEATTY, *Utah*: In Utah we have for sometime provided facilities for the determination of type in pneumonia at the state laboratory. We have considered the furnishing of the serum but have not made any decision yet. I feel that this is a problem which will be very difficult of solution in most states. If the serum proves to have the efficacy which we hope, I do not believe that any community should be denied its use. The fact that it should be a state concern, a matter of state obligation, but under such restrictions as will insure its safe administration, is a subject worthy of our most serious consideration and perhaps might well be referred to a committee to work out some plan that could be suggested as practical.

DR. COLE: In regard to the titer of the serum, I think that all anti-pneumococcic sera now sold in New York State are satisfactory, since a standard has been established by the State Board of Health. The Hygienic Laboratory of the United States Public Health Service has not established a standard of potency, but undertakes to test samples of all serum offered for sale.

I think the Director of the Hygienic Laboratory is fully awake to the needs of the situation and is very anxious to see that only a serum of high potency is sold. While last fall there was a supply of anti-pneumococcic serum on the market which was absolutely worthless, I think that practically all the serum being sold by the reliable houses at present is of good standard potency.

DR. HICKEY, *Colorado*: I have been using serum more or less for ten or twelve years past

and appreciate the difficulties for the man who has not been accustomed to using it. Then there is the practical side to be considered before anti-pneumococcic serum can be used to any considerable extent, that is the matter of meeting the cost. After reading some of Dr. Cole's articles I ran over in my mind what the probable cost to a family in a case of pneumonia would be if one of the commercial products were used, and it seems to me it would range from \$35 to \$50. This would make it absolutely prohibitive in a great many cases which come to the attention of the ordinary physician. States like New York and Massachusetts will manufacture their own serum, but in states which are neither manufacturing or supplying the serum the difficulty from the practical point of view would be very serious.

DR. COLE: I don't know what the regular manufacturer's price is for the serum. If the cost is from \$2.50 to \$3.00 for 100 cc., the cost per patient should not be nearly so great as Dr. Hickey's statement would indicate. The average amount of serum employed in the treatment of a case is about 250 cc.

DR. HICKEY, *Colorado*: The usual price of the commercial serum is \$3.00 for a 20 cc. package and a very little figuring will show that I am not far wrong in my computations of cost.

THE PRESIDENT: Dr. Hitchcock, do you care to make any remarks?

DR. HITCHCOCK, *Massachusetts*: I really don't know just what to add to the report of the Committee. This subject is still in the experimental state so there is no very definite statement that could be made. We realize that another few years will add greatly to our data upon the subject.

It was voted that the report of the Committee be accepted and the Committee continued.

It was voted that the thanks of the Conference be extended to Dr. Cole for his illuminating paper.

### SESSION ON WEDNESDAY AFTERNOON.

The meeting was called to order by the President at half past two.

Dr. Paul Johnson appeared before the Conference and extended an invitation to the members to witness an exhibition of the

film "Fit to Fight" produced and shown by the War Department in its educational campaign against venereal disease. The invitation was accepted for Thursday noon.

### REPORT OF COMMITTEE ON CHANGE IN NAME OF THE CONFERENCE.

PRESENTED BY W. S. RANKIN, M. D., *Secretary of the North Carolina State Board of Health, Chairman.*

*Mr. Chairman and Gentlemen:* The chairman of the committee addressed to the members of the Conference, early in May, the following letter:

"*My dear Doctor:*

"There was, as you perhaps remember, a committee appointed at the last Conference to consider and propose, if the committee thought it advisable, a change in the name of the Conference, the feeling being general in the Conference that the present title of the organization was possibly too long.

"Your committee, of which I am chairman, will deeply appreciate a reply to this letter with two statements: First, your opinion as to the advisability of changing the name of the Conference to a simpler title; second, if you think a change desirable, suggestions of a better name.

"Very truly yours,

CHAIRMAN."

We had thirty-two replies—ten opposed changing the name of the Conference; ten favored changing the name of the Conference; twelve were noncommittal.

The present title of the Conference is "The Conference of Secretaries of State and Provincial Boards of Health of North America." This title is too long and, at the same time, not comprehensive. Its excessive length is apparent. The title does not include state health commission-

ers nor presidents of state boards of health who, in certain instances, are the executives of their health agencies. The title does not include the territorial possessions of the United States. Some of the suggestions of a new title for the Conference are as follows:

State Health Officers' Association,

American Association of Boards of Health,

American Boards of Health Association,

American Health Boards' Association,

Association of State Health Officers,

State and Provincial Sanitary Conference,

Conference of Executive Health Officials,

Conference of State Sanitary Officials,

Conference of State Health Officials.

Your committee recommend that the title be changed to "The Conference of State Health Officials." In making this

recommendation, the committee realize that the title proposed does not fully cover the membership of the Conference from the provinces of Canada, the territories of the United States, and the offices of the Surgeon-Generals of the Army, Navy and Public Health Service; however, your committee realize also that the principal purpose of a name is to designate, not to fully characterize the thing it designates. It, therefore, moves that the title of the Conference be changed from "The Conference of Secretaries of State and Provincial Boards of Health of North America" to "The Conference of State Health Officials."

It was voted that the report of the Committee be accepted and the recommendation that the name of the Conference be changed to "The Conference of State Health Officials" adopted.

(See amendment to this vote on page 78.)

## THE DIAGNOSIS OF MENINGITIS AS A PUBLIC HEALTH PROBLEM.

MATTHIAS NICOLL, JR., M. D.,

*Deputy Commissioner of Health, State Department of Health, Albany, N. Y.*

WHEN I agreed with the secretary of this Conference to take part in a discussion of the diagnosis of meningitis I did not foresee that I should be called upon for an address on the subject. Rather than to take up with you the technical details of diagnosis, with which most if not all of you are familiar, I shall, with your permission, very briefly direct attention to meningitis and its diagnosis, prevention and treatment as a public health problem of the highest importance at all times, and especially so during a time of war, in the hope that the presentation of a few facts may lead to a discussion of the subject eventually productive of intelligent action, on the part of this Conference.

With the exception of epidemic pneu-

monia and venereal disease no infectious disease in my opinion has received less adequate attention from state departments of health than has epidemic cerebrospinal meningitis. Except in large centers of population, even in the best equipped states and those having large appropriations, the control of meningitis cannot be deemed satisfactory. Children and adults yearly die by the hundreds and thousands in villages, towns and small cities, and are buried, with the death certificate giving "meningitis" as the cause, no attempt having been made at exact diagnosis and no specific treatment given for the cases of epidemic cerebrospinal meningitis which account for a large proportion of the total fatalities and many of which might have been saved had they

fallen into skilled hands. As illustrating the necessity for diagnostic skill in determining the exact cause of meningeal symptoms the following figures, taken from a pamphlet by Drs. DuBois and Neal in charge of the Meningitis Division of the New York City Health Department, are of interest. From July, 1910 to July, 1917 the division was called upon by physicians throughout the city to make a diagnosis in 1,805 cases showing what the physicians regarded as symptoms of meningitis. In all cases in which the diagnosticians were unable to attribute these symptoms definitely to the involvement of some other than the cerebrospinal system a lumbar puncture was made, followed by an appropriate laboratory examination. The results were as follows:

Epidemic cerebrospinal meningitis.....	298
Tuberculous meningitis.....	359
Other forms of meningitis.....	124
Anterior poliomyelitis.....	483
Pneumonia.....	134
Other diseases.....	407

While the writers of this pamphlet do not so state, I can assure you that included under "other diseases" there was every possible pathologic condition, ranging from hydrophobia and tetanus to scarlet fever and dysentery. As a consequence of the exercise of this skill and knowledge furnished by the City of New York, a large number of lives were saved by the prompt administration of serum in actual cases of cerebrospinal meningitis and by the exclusion of this disease correct diagnosis were made and suitable treatment advised in other cases, while preventive measures for controlling the spread of various infections were promptly instituted.

For practical purposes the determination of the presence or absence of meningitis in a given case, together with the administration of serum, is not a matter which calls for an exceptional degree of skill or knowl-

edge. It does, however, require technical training and experience, which unfortunately is not possessed by the average physician in general practice, many of whom hesitate to perform the very simple operation of lumbar puncture and are more than willing to have it undertaken by public health physicians.

The final or differential diagnosis of cases showing meningeal symptoms due to causes other than meningitis, requires a wide degree of medical knowledge on the part of the diagnostician and great technical knowledge on the part of the bacteriologist who examines the spinal fluid. In addition to diagnosis and treatment of meningitis the war is emphasizing the importance of control of carriers of meningococci, and the military health officials both here and abroad have already made great advances in this heretofore unexplored and it must be confessed very difficult territory. It behooves the various State Departments of Health to do their part in this work and at once as a very real war measure and one too long neglected. The essentials that the state may exercise intelligent supervision over meningitis are perfectly obvious, whether obtainable at this time in whole or in part is a matter for the future to determine. Certain it is that the difficulty of obtaining skilled diagnosticians becomes greater from day to day. Nevertheless it would seem perfectly feasible for a large number of physicians in the various states to be trained in the diagnostic and therapeutic work, and general bacteriologists in the specific laboratory technique in many of our large cities.

The essentials then for carrying on this work by any state are, *first*, a well-equipped diagnostic laboratory with additional branch laboratories in the centers of population, if it be found impracticable to send specimens promptly to the central laboratory. *Second*, skilled and experienced diagnosticians, as many as are needed to cover the

territory properly, such diagnosticians to be thoroughly trained in lumbar puncture and familiar with the gross appearance of abnormal spinal fluids and the method of administering serum when required. Beyond this knowledge their efficiency will be directly in proportion to their general medical knowledge, especially of the acute infectious diseases. *Third*, uniform rules and regulations in all the states regarding the quarantine of epidemic meningitis and the control and treatment of carriers of meningococci, and *fourth*, a standing committee representing the State and Provincial Boards of Health, one member at least of which shall be a thoroughly trained epidemiologist and another a bacteriologist who has given especial attention to the various pathologic conditions affecting the cerebrospinal system, such a committee to confer from time to time as they may be called upon to do so, with representatives of the medical department of the Army, Navy and Public Health Service.

#### DISCUSSION.

DR. McCULLOUGH, *Ontario*. At the present time I appreciate very much the opportunity of hearing Dr. Nicoll's paper. As with us, the conditions of war have, as I presume with you, made considerable changes in our attitude towards some of our public health questions. One thing it has done for us is to improve the diagnosis of spinal meningitis. Just as Dr. Nicoll pointed out the returns of vital statistics in regard to this disease do not class it as cerebrospinal meningitis, but simply meningitis. We found at the out-set of the war there was a very severe form of epidemic cerebrospinal men-

ingitis in the Canadian army. Our death rate from this infection was high. In 1915 in the military district I believe we had 16 cases and lost 8 of them. Following that the Government detailed another medical officer and myself to go to New York and obtain what first hand information we could in regard to this matter. We saw Dr. Neal and others on the New York Board and gained some valuable information from them. On our return we got our medical officers together and gave them the benefit of the information we received. Since then our medical officers are very quick in diagnosing cases of this infection and our death-rate the following winter was cut down 50 per cent. Now in the Public Health Service in the Province of Ontario whenever we get notice from outside practitioners that they have a case in which they are uncertain of the diagnosis as to whether it is infantile paralysis or meningitis, we send our epidemiologist to the spot and he makes the diagnosis, and assists the local practitioner in carrying out the treatment. As a result, we are finding out just what Dr. Nicoll pointed out, that many cases diagnosed as meningitis are not meningitis at all, but where we do get a case of epidemic meningitis we are able to render some real service.

The Board of Health of New York City has set a splendid example in regard to this as well as to other diseases by its plan of assisting in the diagnosis, and it was a great matter of regret to me when I learned that a great deal of the efficiency of that splendid department had been offset through political machinations.

DR. NICOLL: For the sake of the last speaker's peace of mind, I wish to say that the New York Board of Health was not so much upset as were the political powers.

It was voted that a committee on cerebrospinal meningitis be appointed.



## THE WAR TUBERCULOSIS PROBLEM.

## REPORT OF THE COMMITTEE ON TUBERCULOSIS POLICY.

PRESENTED BY DR. H. M. BRACKEN,

*Secretary, Minnesota State Board of Health, Chairman.*

I have submitted the report in the form of resolutions and you have a copy of these resolutions. It happens that about a year ago I presented a paper before the Climatological and Clinical Congress in the form of a questionnaire and it was published. Dr. Arnold Klebs read my questionnaire with its answer, and wrote a set of replies to it. My argument for

the questionnaire and Dr. Klebs' answer appeared in the *Journal of Tuberculosis* for April. The outcome was that Dr. Klebs was invited by Dr. Kelley to open the discussion on these resolutions. They have been submitted to the Committee members, and endorsed by those I heard from.

WHEREAS, Tuberculosis is recognized as a communicable disease,

WHEREAS, This disease is spread by the presence of the tubercle bacillus in the sputum of those suffering from the disease;

*Therefore, Be it Resolved That*

1. Tuberculosis is a social as well as a sanitary problem and its control should be liberally provided for by the state.

2. Tuberculosis should be a reportable disease to the state health authorities.

3. The removal of a tuberculous patient from one state to another should be carried out only under the reciprocal notification plan.

4. Every tuberculous patient should be under sanitary supervision. This does not mean that the patient should be under restrictions, but it does mean that the sanitary authorities should satisfy themselves as to whether the individual is living in such a way as not to endanger others.

5. The early case of tuberculosis should be cared for with the intent of bringing about a recovery. There is no danger to others from such a case so long as it remains a closed case.

DR. BRACKEN:

The first proposition calls for no explanation.

Neither does the second require any.

It is not my intention to make any hardship for such patients. We know that the tuberculous travel now, but the point is to have supervision over them so that we can keep track of cases of tuberculosis.

This does not mean that the patient should be under restriction but that the authorities should satisfy themselves that the individual is living as he should. I feel that the health authorities should be brought into contact by reports with the tuberculous in the city or district and that there should be a general supervision. It should be for the sanitary authorities to determine what liberties the individuals should be given. There need not be any restriction on the individual so long as he is not a danger to others.

6. The sanatorium is the best place for the early case of tuberculosis. The purpose of the sanatorium is:

a. The treatment of the individual, which should comprise not only medical supervision but also dietetic and psychic.

b. The education of such individuals as to their proper mode of life.

c. The control of the disease.

7. The "open" case of tuberculosis should never be left at home in association with young children. The open case can be cared for at home if it is possible to prevent the association with children.

8. The sanatorium is the best place for the "open" or advanced case for the purpose of

a. The control of the disease.

b. The care of the patient.

9. The "open" case of tuberculosis should be cared for.

a. In order to prevent the infection of others.

b. In order to bring about if possible, the recovery of the patient.

10. The sanatorium should not be considered primarily either a hospital or a boarding house. It should be so conducted as to make the patients satisfied and willing to stay.

11. If tuberculous soldiers or sailors are discharged from service, the health officials of the political division to which they are going should be advised of the fact in order that they may be properly cared for at the point of destination.

12. Cases discharged from a sanatorium should be followed through social service standardized under the board of health of the state.

13. A special institution should be provided to which the incorrigible tuberculous may be committed.

We have tried to cover the essential points in this report for argument. I assume all of these points are answered in the affirmative by the members of the committee. They are by Dr. Black. I have not been able to reach Dr. McCormack. There is nothing further for me to say in introducing the subject. Dr. Klebs is to open the discussion and I believe he takes a somewhat different view on many of these points.

Please note I say the sanatorium is the best place for the early case of tuberculosis, and that I make three points for the handling of the early case.

This does not mean that the open case must be taken from home, but that there should be no association with young children. We know that a large part of the infection is received during childhood. Then it is up to us to protect the child.

I feel that in the open case we have the two points, control first, care second. Of course many of the open cases may improve. If they do, well and good, but our chief functions with these cases as sanitarians is to see that they are not spreading infection to others.

Dr. Klebs: My attitude in public health problems differs from that of Dr. Bracken only by a different point of view I take of the same set of facts. I believe chiefly that in these problems we consider too exclusively the side of specific infection. In the many years during which I have worked with Dr. Bracken and others on tuberculosis we came scarcely ever to a disagreement on measures but our opinions may have varied on their relative importance. I can therefore discuss Dr. Bracken's resolutions only as a whole from the point of view of policy.

## THE POLICY OF HEALTH AUTHORITIES IN THE PROBLEM OF TUBERCULOSIS.

ARNOLD C. KLEBS, M. D.

*Matière vivante et conditions extérieures: la vie résulte constamment du rapport réciproque de ces deux facteurs.*

—Claude Bernard.

INNUMERABLE things in our daily lives, some trivial, some sublime, constantly remind us of the validity of the germ theory. Every can of fruit or jam, every potted ham or chicken, every jar of pasteurized milk, every "fresh" egg two years old, all the aseptic and antiseptic paraphernalia of the modern surgery or nursery, the diphtheria antitoxin, the typhoid inoculations, and last but not least, that greatest of our national achievements, the Panama Canal, all are the ever present reminders of the fact that the grasp of a fundamental truth has allowed us to do definite and immensely useful things. Thus the germ theory is our one great central idea which still dazzles us and holds us captive. To its elaboration we bend all our strength, to it we subordinate all our efforts, for its simplicity, its clearness and the definiteness of results makes any other factors appear subsidiary and of lesser importance. It is not the irrefutable logic of the idea, but the emotional warmth, the enthusiasm over the achievements to which it has led, which explains the hold it has gained over us. It has ever been so with all ideas which have spread among the people.

The measures taken against tuberculosis are largely dictated by the dominating concept of its infectious origin. I have come to question seriously whether this continues to form the best basis for a policy or whether there is hidden under the name of tuberculosis a broader problem which well deserves, for a long time to come, the most

painstaking attention of health officers. It is from the standpoint of policy only that I wish to discuss this resolution.

I remember well the days when my recommendations of most of the measures enumerated in this resolution, and others such as housing research and reform, and labor insurance would have aroused but lukewarm attention. Now they have become accepted commonplaces, and we have hundreds of tuberculosis specialists and a little army of propagandists. The latter do some good at a vast expenditure of paper and emotional energy, for them the issue has become a creed and the crusade is kept up because the crusade supports them. We fail to protest against the manifold exaggerations of the propagandist, because we realize that he has done and is doing some good, but we fail to realize that by the very noise he is making he is influencing our own judgment, that we unconsciously repeat the dogmas which he keeps before the public. I see the influence of this in the resolution before you and I believe it is high time that we as scientific men rid ourselves of such influences.

The premises of your resolution postulate that tuberculosis is a communicable disease and that the disease is spread by the tubercle bacillus contained in excretions. This, I believe, goes too far in one direction and not far enough in another. Too far in insisting on the infectious nature of the disease and not far enough by viewing the social aspect of the disease solely in the light of its communicability. *What*

*is important to recognize is, not the fact that tuberculosis is caused and spread by a germ, but that the civilized races have, in the course of several generations, developed a very high degree of natural resistance against the disease, that this resistance seems to be on the increase and largely uninfluenced by any measures we have instituted and that in the cases in which this resistance gives way it is due in the overwhelming number of instances to faulty social conditions and not to specific causes.* True science has found out long ago that the so-called "law of causality," i. e., that like causes produce like effect and that one can prevent the effect by destroying the cause, has had its day of usefulness. In the aetiology of disease it offered a formula which appealed by its great simplicity. But this exists no more, exceptions to the rule are piling up at a dangerous rate. It is hard to leave an old formula that has led to signal successes, still it has to be done, and it will be done when it is once realized that a stubborn adherence leads us nowhere.

That the old formula is valid and has furnished measures of proved usefulness is demonstrated by cleverly manipulated statistics. I do not question the sincerity of the people who tried to prove to us by mere figures that the increase of tuberculosis during the war in France was due to the negligence of the sanitary authorities. The figures themselves have been disproven in the French senate, but the worst part of the affair is that such people attempt to draw perfectly fallacious conclusions from such data. Careful sanitarians understand very well the great value of vital statistics, but they know they have only relative value and are wholly untrustworthy for proving the efficacy of methods against a disease of so complex an aetiology as tuberculosis. A jugglery with figures is entirely unworthy of our high profession and ought to be discouraged whenever there is an opportunity. I just happened

across a curious one in the last (April) number of the *Contemporary Review*. Although it is well known that the declining birthrate greatly troubles British sanitarians, one of them is here quoted as stating that in the United Kingdom during the whole duration of the war (August, 1914, to end of June, 1917), when deaths from all and every cause in the armed forces were discounted, there still remained an excess of births over deaths of 904,000. This large figure given by itself of course is meaningless, but when the speaker sees in them only a sign that "greater health activities" were stimulated by "the actual and potential loss of life in the war itself," one is staggered.

Now you will say perhaps: "Admitting the unreliability of the statistical test, how can you get away from the central fact that the germ causes and spreads the disease, and that no matter what else we do we must concentrate the attack upon it?" As I have said, I do not deny the fact, only I consider it irrelevant in a comprehensive effort for the protection of collective health. We dwell entirely too much on it, we have already created a most unwholesome atmosphere of bacteriophobia. Scientific facts must not rob us of common sense. Why do we continue to look at the germ almost exclusively from the point of view of the harm it may do or the possibility of a remedy it may furnish? Is it not more helpful to look at the good it does? Wasn't it indoor dirt that made civilized man adopt cleanliness, and isn't cleanliness one of the main distinguishing features between degrees of civilization? And microscopic dirt, the germs proper. You will say it brought us asepsis and antisepsis. Surely it did, but what is more important, it explained what we were gradually realizing in our habits, that fresh air and sunlight are practically germ free and necessary "cleansers," needed also in our houses. But most important, it made us discover

the law of specific immunity, which if we look at it broadly, teaches that we have the power in ourselves to develop in the daily contact with the germs most commonly with us, a resistance which later on protects us. We have successfully utilized the principle for artificial immunization after the pattern of vaccination, but we almost forget that this is only a feeble imitation of natural processes operative constantly on an immense scale. And we forget that these natural processes take place mainly in childhood, the age most plastic and receptive to all formative influences. Those are some of the things worthwhile insisting upon and not the wholesale inoculation of fear and dread.

Nowhere is this attitude bound to have more pernicious effects than in tuberculosis, and nowhere is it less justifiable. Every well-informed man knows that against no other disease is civilized man so well immunized as against tuberculosis. If he were not he would die of it, as do certain uncivilized, colored races, after a brief acute illness. Every thoughtful man realizes that the long protracted, chronic course in tuberculous disease, is due, not to some particularly fiendish intent of the germ, but to the fact that despite momentary defeats the natural resistance asserts itself again and again. This is true for those struggles through which every civilized man has passed, unobserved and known only by the scars found somewhere in his system after he has died: it is equally true for the few where the struggle is more manifest, those we used to call consumptives and now call tuberculous, the same as the other, although there is the great vital difference between them, that one is well and the other is sick.

Here we come to him and scrutinize him with stethoscope, or with tuberculin. We find tuberculosis. But he is not sick. Then he ought to be. And if he does not want to be? We wash our hands, if he is

rich; if he is poor, he becomes a potential danger, a potential criminal, because he may spread the disease. You think I exaggerate. Not at all, if you scan the specialistic literature you will become convinced that the sole reason why tuberculosis persists against all the noise of the propagandist, is the "incurable tuberculous" [this has become the technical expression]. I will cite only one instance. At a recent legislative hearing in Massachusetts the superintendent of a penal institution calculated that he would have to find provision for 1,500 cases if the incurable tuberculous had to be segregated. Lyman, tuberculosis expert of Connecticut, merely sneers at this, tells him that he is raising a "pet ox," deceiving himself and others. But out of the depth of his or rather his nurses' personal experience he draws the pictures of ten dreadful cases, which, he says, "show that the criminal or careless consumptive is indeed a problem in our state work." When you read the histories of these ten wretched victims of a social order for which they are not responsible, you wonder at the expert's invectives and his sneers at the "sentimental feeling" about the constitutional right of man which opposes compulsory segregation.

Again and again that central fact, the tubercle bacillus! We look at it as if it contained some subtle and dreadful poison or the potentiality of some high explosive that may come off at the slightest provocation. You say: But we are paying attention to other things, to industrial conditions, to housing. Yes, but so little that it hardly counts. Take the late report of the National Industrial Conference Board, certainly the most representative body that may be supposed to command facts. Here we might at least expect solid information. It purports to give a scientific analysis of the established facts "relative to the effects of hours of work upon output and health of workers." Now we know

(the report even reprints the facts in a table from the United States census, 1909) that the death rate from tuberculosis among cotton mill operatives is higher than from all other occupations, that a larger percentage of them commit suicide, die of apoplexy, and paralysis of diseases of the circulatory system, of cirrhosis of the liver and of unclassified and unknown causes than any other group of mechanical employees. As a critic of the report points out [Bruère, *New Republic*, May 25, 1918]: "in face of such evidence this 'scientific analysis' announces the complacent conclusion that 'the most significant fact brought out . . . is that apparently there is no conclusive information as to the health hazards to which cotton mill operators are exposed.'" Probably the expert cited above would find that among them there is a particularly large number of the careless and he would easily solve the problem by the "forceful segregation" of these criminals.

As regards housing, the war has started an enormous activity in a new direction, the creation of new government-owned communities for industrial workers. We are looking forward to the results hopefully but not without some apprehension, for if the precedents of some of the earlier enterprises are followed the promise is dubious. It is to be hoped that the garden-city planning which has brought admirable results in England, will receive full attention. This for the auspicious future, the past is dark indeed. The unspeakably vile tenement conditions in New York for instance can furnish to any visitor a sad, but unmistakable commentary to certain statistical fantasies about reduced tuberculosis rates, compiled in municipal offices only a few blocks away.

As regards sanatoria, we have indeed done a great deal. The native genius for building has asserted itself here in a most gratifying manner. As I have pointed out

in international gatherings abroad we have evolved in America a type of building, simple, eminently practical and cheap, far superior to the expensive caserne type favored in Europe. But while we evolved this type in such a free and independent manner, we have not striven in the same manner for a more rational method of utilization of these institutions. Progress has also been made in this line, but the German prototype of the Dettweiler-Brehmer régime is still too rigidly adhered to. I have pointed warningly to this tendency already in 1900 and 1902, although I have always been a warm advocate of the sanatorium. I cannot enter into details here, I can only point out the general principle as I see it. In that aspect, most sanatoria are suffering under a dead, inelastic routine which while it puts a few pounds on the patient often makes out of him a disgruntled, fussy health crank who cannot think of anything else but of how to keep his temperature down and his weight up. You know the type, lately he has become literary and reams of paper are covered by his health wisdom. Such methods form a regrettable and, from the social point of view, a dangerous shortcoming. We can avoid it only by changing our whole standpoint about the real meaning of the sanatorium. Your resolutions want it used for the "control of the disease" as an institution of segregation of the advanced case. Now I believe that the advanced case, and by that I mean the case that any "cop" on the street can recognize as such, not the artificial type that fits into some arbitrary scheme of classification, does not belong into a sanatorium, but into a hospital, if he cannot be cared for at home. The sanatorium should be open only to those who have the physical and psychic fitness to become again useful members of society. The sanatorium, unlike strictly medical institutions, is intended to remove from

the patient for awhile the strain of life that has lowered his natural resistance. The disease itself receives secondary attention. If the patient is pestered with rules and regulations, kept in constant fear of disastrous consequences on the slightest infringement, when he is given monotonous leisure to contemplate his hard luck, the precariousness of his outlook, the strain of life continues in a new form and he gets no lasting benefit. That is why we get bad reports about lasting results. The sanatorium must be primarily an educational institution, but not of meaningless health ideals or ideal modes of life, but of those that fall within the possibility of the patients future place in the community. Most depressing is that he is labelled as a potential danger to others. The spittoons everywhere in reckless profusion alone keep up this depression—and expectoration. As if civilized man could not learn to spit discreetly! No, our sanatorium buildings are splendid, but the spirit in many of them is distinctly depressing when it ought to be full of hope and rejoicing at the opportunity offered. Apprehension and fear, more than any bacilli and toxins, break the natural resistance of man to tuberculous disease, and any institution that raises them systematically instead of combating them from the day of admission to the day of departure does not fulfill its mission. A generation of workers is growing up that is realizing more and more the importance of these principles. They ought to be encouraged by every possible means and not hampered by all sorts of so-called scientific safeguards, reservations, apprehensions, etc.

The central fact of infection and communicability from which we view the whole tuberculosis question, has raised two practical contingencies: the *obligatory reporting of cases* and *protective measures against the danger to children from tuberculous parents*. If the notification were confined to the cases with profuse sputum containing

tubercle bacilli, the measure would at least have a logical justification. But extended to all tuberculosis with the intent of placing all patients under sanitary supervision, as the resolution proposes, it puts a great burden upon three sets of people: the health authorities, the public and the physicians, justifiable only if it can be clearly shown that the need for it exists in the interest of the community. I have studied carefully the literature of the subject without being able to find any clear demonstration of such a need and I have also found that where the system is introduced it is either ignored or leads to some perfunctory bookkeeping. Dr. Bracken sees statistical value in the recording of all cases over a series of years. I fear that such records would be meaningless if they show solely the proportion of diagnosable cases to those not diagnosable. If records within practical limits were kept to throw light on the relation of incidence, not to infective foci alone, but to definite social or other environmental conditions, something might be gained. Such desiderata can however be met better by special investigations, carefully planned, than by general notification.

In this as in so many phases of the tuberculosis question we encounter a chaos of opinion on what constitutes a tuberculous case that needs watching by the authorities. If the old formula determines our policy we get a lot of cases that much better would be left alone. The tubercle bacillus in the sputum evidently denotes that the resistance has broken down. But nothing can tell us whether this is a temporary break or a permanent one. If we are not prepared to help effectively in such a case we only do harm by labelling the patient. The tuberculin test is used for diagnosis and this augments the cases inordinately. It is an absolutely erroneous use we make of this valuable test. We forget that while it brings out the fact of an infection

at some previous time, it is the clear indication of an established and often sufficient resistance. Hence the non-reacting or feebly reacting case may merit our attention but certainly not the positive one. Used in this sense graduated tests like the Pirquet tests have undoubtedly their value, especially in childhood, but for diagnostic purposes simply, I believe that the less we refine our methods, the more good we are able to do.

Now in all those points so far discussed I have found quite a number of men who have given close attention to the subject, ready to accept my viewpoint. However, as regards the attitude towards childhood infection, I have found the greatest hesitation about the applicability of any other formula than that of contagiousity. The danger of the "open case" to children looms up large in the conception of most. Behring, as you know, held that most tuberculosis was acquired in childhood. The fact was verified and generally accepted. But, I think the conclusions drawn from it have been either wrong or one-sided. We kept on insisting on the importance of this early infection when the fact that really counted was that in most instances we are immunized against the disease during childhood. The racial immunity against tuberculosis, which undoubtedly exists, is very likely not transmitted by heredity, only the faculty to react readily and effectively against certain infections. The mechanism of transmission is not yet clear, but we do know that the resistance against tuberculosis being about zero at birth rapidly grows during the later years and is maintained throughout life in the majority of cases. To make this possible the antigen must be furnished by the environment. If the child is brought up aseptically it will not be infected, but it will also not be immune. The question is whether this is an advantage or not? Direct experiment or statis-

tics can hardly give a satisfactory answer. But it is common clinical experience to find cases of tuberculosis in children (glands, bones, skin) not previously exposed to infection in their families. On the other hand practically all these cases which we used to summarize under the term of "*scrofula*" are confined to children of the poor. And for all of them the rule holds good that if a relatively slight improvement is brought about in the hygienic conditions, they get well very rapidly and permanently, provided that no artificial or spontaneous opening of the foci to the outside has taken place. Even when the focus has been or has opened a permanent cure is possible by simple hygienic management, but this has to be materially prolonged. We have no accurate data as to the subsequent history in regard to tuberculous disease in childhood. But I feel that Marfan's law (1884) is correct, *i. e.*, that in the previous history of manifest adult tuberculosis, childhood "*scrofula*" rarely occurs, that healed "*scrofula*" determines immunity to pulmonary tuberculosis. It is the rarest thing to see a progressive consumptive with the telltale scars on the neck for instance. Now, with this rather common experience of manifest childhood tuberculosis originating in a family environment apparently free of tubercle bacilli, but so clearly due to defects in the hygiene and readily responding to improved conditions, can we really desire for them an aseptic bringing-up? It would not seem reasonable to me, for if we aim at a real protection we should rather think of artificial "seropimulisation" in early childhood and hygienic improvement in the environment of the child, but asepsis would be not only a futile but rather a harmful aim.

Of course I realize that cases of a more dangerous type of childhood tuberculosis do occur and that they may be due to a massive infection breaking through a yet



feebly developed resistance. This mechanism of infection may even explain some of the obscure cases which increase our infantile mortality. Fortunately they are infrequent so as not to affect markedly a general policy against tuberculosis. To say that every child should be removed from the family because of the presence of an "open case" is neither justifiable nor wise. That we ought to do everything possible to promote nursery hygiene and childhood welfare is of course very important, but this can be done, as it is done already admirably by certain agencies, by measures which are helpful and not coercive, and without breaking up families. When it is more generally realized how little-important is the fact of childhood infection and how all-important is that of the immunization of our people during childhood, common sense in the nursery can win victories over pseudo-science. Just as sensible parents and physicians, in times of a light epidemic of measles, will rather expose than segregate their charges, the same principle ought to hold good in tuberculosis. Such immunization, one may object, is a rather haphazard and uncontrollable process. That is certainly true but so are all processes of natural adaptation and on the whole they work better than the artificial ones.

Health authorities can never make a mistake in preaching and teaching cleanliness in the homes. They can never improve upon it by insisting on disinfection. Air, sunlight, brush and water, and an established habit of using them is of greater value to a community than any method of disinfection. But even that is not enough. By good building laws, healthy, easily cleansable, airy living quarters for the poorer classes must be insisted upon against the rapacious real estate speculator. That is the task, and not the disruption of families by coercive measures.

We are evidently in a dilemma: tuber-

culosis is clearly infectious and communicable, more often it produces no symptoms at all and therefore is no disease, then again it seems to be at the bottom of a very serious disease, especially serious because of its chronic course at the most important ages, shortening many presumably useful lives. Having adopted an etiologic standard for our disease classification we have ranged tuberculosis in the class of infectious diseases. From here we think we cannot very well remove it, and to distinguish it as "infectious" from "contagious" would seem hair-splitting, and serving no useful purpose. I hope to have shown how unsatisfactory and prejudicial this terminology is and how it hampers us in every step. I have become convinced that we will not make any real progress in the matter until we get away from the name and the etiologial classification. In another, also socially important group of diseases, the venereal ones, we are doing it already. Especially from the point of view of the public health service such a grouping of diseases would have distinct advantages. I do not wish to make any definite suggestion; the matter needs very careful consideration from many viewpoints, but I believe, that a group of *chronic pulmonary diseases*, to include what we now register under tuberculosis would bring about automatically an improved service, especially if this group would, with other groups of more or less chronic ailments, be subordinated in a large class of *social diseases*. There cannot be any doubt about it, that the disease producing or provoking factors arising out of the environment of the modern patient, *i. e.*, the social factors are pretty nearly the same or at least very similar for all these ailments, and that measures taken against them ought to be coördinated. That would work for greater efficiency, economy and simplification. But this cannot mean only verbal changes in the resolution, it deserves an entire re-

shaping of our conceptions and a new formula. We must view the subject of tuberculosis processes from a broader standpoint; that tuberculosis on the whole in our race plays the rôle of an immunizing agent, that phthisis, *i. e.*, the softening, liquefying processes, arise, out of tuberculosis, making for physical deficiency, is due to non-specific factors in the environment. Then, when we look at it from the effect this process has on the individual we will get much farther if we distinguish classes such as the "permanently unfit, possibly fit and certainly fit," as recently proposed by Sir William Osler (*Lancet*, Feb. 9, 1918) for other groups. Such standards of fitness are receiving great attention just now in relation to recruiting, but they are still more important from the public health point of view than a merely ætiologic or pathologic differentiation.

As I have said, not much can be gained by suggesting verbal changes here and there in the resolutions. As it is formulated now I believe that it stands on premises which have lost their importance. If the premises which I propose meet with approval I believe it will be necessary to reshape our entire policy and that can be done only in coöperation with agencies already active in other branches of public health work. Without such coöperation the proclamation of a new policy would have academic value only. But I am thoroughly convinced that with the old formula a real progress is impossible, the quibbling with terms and the misunderstandings which are so apparent throughout the literature on the subject will continue with paralyzing effect. The military authorities have lately shown that they are ready to consider from a broader viewpoint the subject of deficiency by utilizing the services of those found unfit for first line duty in a labor army of some 200,000 defectives. This is a great step in advance and has a direct bearing on our subject.

Public health work will receive a great stimulus if it organizes itself on similarly broad lines considering their charges as elements of a large national army in which every one has a place for the good of the whole.

#### DISCUSSION.

DR. BRACKEN, *Minnesota*: Just a word before the discussion is opened. I assume that the sanitarians present largely agree with the resolutions presented, but we now have before us Dr. Kleb's presentation of the matter. I think it would be a great mistake for this organization to adopt these resolutions without very careful consideration. It might be wise to refer them to a committee to report next year. If possible, we should have a conference with a similar committee appointed from an organization representing, largely, clinical men dealing with this subject.

DR. HICKEY, *Colorado*: We all recognize the very great importance of the control of tuberculosis especially at this time. Colorado has a large problem. We have as you know many people living in Colorado who have come there for tuberculosis in whom the process has become arrested. They are living their lives on the farms and are engaged also in all sorts of business. These men are subject to the draft like other men and they come before the examiners who are the accredited agents of the federal government, and it so happens with us that a considerable proportion of these examiners are men who have not been doing tuberculosis work, who have been interested particularly in surgery, for instance. Many of these arrested cases have been passed by the draft board. They go down to the camps for training and during the strenuous training of the camp life they begin to show signs of active processes in the lungs. In some cases this occurs in a short time. These men break down and after they have been kept in the hospital for a time, perhaps, are sent back home. They come back, many of them with marked temperature and with all the conditions which make it absolutely imperative that they be kept in bed. These men have been taken from their place in life where they were able to earn their own living and were useful members of society,

and they come back in this condition, unable to take their place in life.

It seems to us in Colorado that this is going to present a large problem. Not only do we have men who were former residents of the state, but besides them we have a considerable number coming to us through the medium of the Red Cross. A knowledge of these cases comes to the state health authorities and we have to give attention to these cases as well as to those which belong to us. I understand that no provision at all has been made by the national government to assist in any way in the care of these cases, provided they have broken down within ninety days from entrance into the Service. It seems that there is a certain element of injustice in this practice, which means that a man may be taken from his customary surroundings where he has been able to make his own way, and, if he breaks down within a stated time, returned to his home, many times without any means of caring for himself.

DR. PALMER, *Illinois*: It strikes me that there are two ways in which progress may be made in the control of tuberculosis: by coöperation with extra-governmental agencies and by stimulation of the medical profession to adopt a different attitude toward tuberculosis.

One thing tried out in Illinois may be of interest to you. The State Department of Public Health, coöperating with the State Tuberculosis Association and the State Council of Defense, has created county organizations responsible for the returned tuberculous soldier and for other war-time tuberculosis activities. The county medical societies were asked to designate men who should be known as the county medical directors of these organizations with the understanding that they must be men conversant with the early diagnosis of tuberculosis or willing to take special instruction in diagnosis. One of the most encouraging and promising things I have seen in the organized warfare against tuberculosis was the bringing together of these medical directors in Illinois, coming at their own expense to spend three days attending a course of instruction in the early diagnosis of tuberculosis.

In answer to the question of the gentleman from Colorado as to provisions for the care of returned tuberculous soldiers, I would say that

the Home Service Section of the American Red Cross has recently entered into an agreement jointly with state health departments and state tuberculosis associations through which the Red Cross will provide most of the funds for the care of these men. In Illinois, however, the Red Cross will take no action for the relief of the returned tuberculous soldier unless the diagnosis and outline of treatment are approved by the state health department and the state tuberculosis association.

DR. NICOLL, *New York*: While I am quite in accord with the idea that these resolutions be considered for another year, on behalf of New York, and I think it is true of some other states, we are definitely committed to the county sanatorium method of looking after tuberculosis. Formerly, up to a year ago, we had an optional law, that is, any county could go to the general election and so determine whether the people in that county would establish a hospital, and under that system a good many established them. Last year, distinctly as a war measure, and on advice from Washington not officially perhaps but by conversation, we passed a mandatory law making it necessary for the counties to build a hospital if they had a population of 35,000 or more.

We had a shock the other day when the Federal Reserve Board notified us and the counties that all permanent construction would be stopped by the federal government. Now that means that they can put up only temporary shacks in these counties. You can't get money in New York for temporary shack construction. Now I think it is about time that we should get an expression of opinion from the federal government as to what we are to do in this matter. So far as New York is concerned, the individual counties want to take charge of their soldiers. They don't want them to go to other places. They also want to take care of men who are found to be tuberculous upon examination by draft boards. They want to take care of their own people. This is contrary to the policy of the federal government, and if it is the consensus of opinion that we are barking up the wrong tree, as shown by Dr. Klebs, I, personally, representing the state of New York, would like to know what the wishes of the government are in this respect.

DR. McCULLOUGH, *Ontario*: Does the state

of New York assist the counties in the financing of these sanatoria?

DR. NICOLL, *New York*: Every county hopes the state will help. As a matter of fact, each county finances its own hospital with a bond issue.

DR. DAVIS, *Texas*: I hope that the third recommendation of the Committee relative to the removal of tuberculous patients, will be very carefully considered. Texas has been made the dumping ground for many of the eastern and northern states in this respect, and it has reached a stage that some of the smaller places are practically bankrupt trying to care for non-resident cases of tuberculosis.

DR. ROYER, *Pennsylvania*: I would like to move that the report of the Committee be accepted and the Committee extended so as to include in its membership active members of organizations interested in tuberculosis.

DR. BEATTY, *Utah*: I would like to know from Dr. Klebs whether he agrees in the efficiency of any program of prevention in tuberculosis other than the sociological solution. In other words, whether he is opposed to any effort of this Conference to bring about a plan to take care of the problem that the draft board has brought on.

DR. KLEBS: In final analysis tuberculosis merits consideration from two important sides: one is the infectious character of the disease and the other is the non-specific character of the disease, both coming, as I understand it, under the jurisdiction of the health authorities. The first has led us to attempt, for instance, the control of the incorrigible consumptive as a potential criminal. We need only to proceed a little further in this direction of control by force and we will be in trouble. I insist that the infectious element in the disease is not the important one. The factors that make out of the infection, which in the vast number of instances is harmless, a debilitating chronic disease, these factors deserve the fullest attention. These factors, non-specific and social, make a disease out of infection. The infectious element we can take care of by simple routine measures, we need

not insist upon them every time we speak of tuberculosis, for we need all our energy and intelligence to cope with the real enemy behind infection.

The subject is in a chaotic condition. Everybody is confused, nobody understands anybody else. The social worker talks infection, the physician talks social disease. I have heard these talks for more than twenty-five years and have become convinced that talking will not get us anywhere. We have to get to work, combining all the different agencies interested in public health and welfare, and carefully plan a definite new scheme. If any one organization can take the lead in such a strategical movement, I think, it ought to be yours.

DR. RANKIN, *North Carolina*: I wish to amend Dr. Royer's motion by moving the appointment of an enlarged committee on tuberculosis as suggested by Dr. Bracken and Dr. Royer, and that this report be referred to this Committee for further amplification and report to the Conference next year. (Seconded and carried.)

DR. KELLOGG, *California*: In connection with the tuberculosis question, I would like to touch upon a problem affecting California and that is the matter of the discharge of tuberculous soldiers by the government and the giving to these men of means of transportation in money. These men are given money for transportation to their home state and where they are discharged in California their tendency is to remain there. They soon spend the money and become public charges in a strange state and many miles from home. This trouble prevails in California more than anywhere else, and if there is any way by which the situation can be remedied by action of this Conference I should be glad of it. This might be done by means of a resolution recommending that the War Department issue transportation not in money but in ticket form. I feel it is to the interests of the men who are being discharged that this be done. The men will be better off to be returned to their home places. I will present a resolution to this effect before the Conference adjourns.

## THE WAR PROGRAM OF THE NATIONAL TUBERCULOSIS ASSOCIATION.

BY C. J. HATFIELD, M. D.,

*Executive Secretary.*

(Read by title.)

For the first time in the history of war, tuberculosis has come to be recognized as a serious problem of armies. Profiting by the experience of European countries, when, a little more than a year ago, the United States government resolved to cast its lot with the Allies, one of the first problems to which the Surgeon General's office addressed itself was the control of tuberculosis among our troops. At its last annual meeting the National Association presented resolutions urging upon the War Department the significance of tuberculosis as a war problem and offering coöperation in any endeavors to weed out the disease from the men being drafted or enlisted in the army and navy, and to provide measures for education and control of the disease for those who were already in the service. In the efforts to coöperate with the office of the Surgeon General, the representatives of the National Association have been accorded every possible courtesy and means of coöperation.

The war program of the Association falls naturally under several distinct heads:

### 1. FOLLOW-UP WORK.

The first and probably the most important part of our program is the follow-up and after care of men rejected at training camps and by local examining boards on account of tuberculosis. Early in the war it was realized that at least 2 per cent of the men being called into service would be ejected because of tuberculosis either by their local boards or after they had arrived at a training camp. These estimates

have been fully justified by the figures thus far available and it is probable that when all of the records have been compiled these figures will be found to be too low.

Up to the middle of May the National Association had received, through the office of the Surgeon General and from other sources, the names of over 11,000 men rejected at the training camps because of tuberculosis. The functions of the Association with reference to these men have been, first of all, to transmit the information received to state boards of health, state anti-tuberculosis associations and division directors of Civilian Relief of the American Red Cross and to urge upon these agencies the necessity for immediate follow-up and provision of adequate care for each case. In the second place, the Association has endeavored to spur its various affiliated agencies to the necessity for providing such adequate care. Thirdly, we have endeavored to secure harmonious and satisfactory working relations between the public health agencies and the American Red Cross in an endeavor to see to it that each case was provided with adequate measures for the treatment and control of the disease without duplication of effort.

The reasons why names of all discharged tuberculous soldiers are sent to three different groups may not be apparent at first glance. The state health authorities should, of course, receive first consideration and the lists of names are sent uniformly to them unless requested otherwise, as has been the case in one or two

instances. The state tuberculosis associations are included for two reasons; in the first place, it is important that they know something of the extent of the war tuberculosis problem and receive this information first-hand so that they can pass it on at once to their local organizations; and in the second place, it is important that these voluntary agencies be in a position to assist the public officials and other groups entrusted with responsibility of providing adequate care for these men.

The names are sent to the American Red Cross officials because this group is officially entrusted with the responsibility of providing relief where relief is necessary for the soldiers and their families. It has been practicable in certain sections of the country to work out schemes of agreement between the Red Cross, the health authorities and the tuberculosis agencies, so that the problems of relief could be taken care of properly.

In transmitting these lists, emphasis is laid on their being confidential, and also upon the absolute necessity of conference between the three interested agencies in order to avoid duplication of effort. It is clearly pointed out that responsibility for care belongs primarily to the state health officials; secondarily, to the anti-tuberculosis associations; and in the third place, to the Red Cross.

Due to a number of legal and military difficulties, it has been impossible up to the present time to secure in any considerable number the names and addresses of the men rejected by local examining boards. The office of the Surgeon General has assured the National Association that this information will be forthcoming in the near future. It is probable, however, that when the records are finally compiled and ready for distribution, they may be of use only for statistical purposes and of little value in the follow-up of individuals.

## 2. EDUCATIONAL WORK.

The second phase of the National Association's war program has been its educational work. In full coöperation with the office of the Surgeon General, the Y. M. C. A., the Commission on Training Camp Activities and other agencies interested in the health and education of the men in the camps, the Association has worked out a campaign which has the following interesting features:

(a) An exhibit of 15 panels on "the health of the soldier," specially designed by an artist of national reputation. The emphasis of this exhibit is not so much on tuberculosis as it is on fitness, and prevention of numerous respiratory diseases that have been epidemic in so many camps during the past winter and that can frequently be controlled by proper education of the rank and file.

(b) A stock lecture entitled, "The Eternal Battle" with a set of 41 slides has also been prepared. This lecture like the exhibit lays the emphasis upon the general conditioning of the men and the necessity for fitness rather than upon the symptoms of tuberculosis itself.

(c) A special circular entitled "Red Blood," in which stress is laid upon the necessity for the soldier to see to it that he himself maintains a patriotic attitude towards being fit for fighting.

These three features of the educational program have been furnished in sufficient quantity for the immediate purposes of the Educational Bureau of the War Work Council of the Y. M. C. A., and through that organization they are being distributed to each of the training camps throughout the country. It is planned, after this material has been sufficiently tested here, to make arrangements for transportation of it to our men overseas. In the preparation of this material, every effort has been made to provide attractive and wholesome matter and to see to it that nothing was

put out that would in any sense either mollycoddle or scare the men concerning their health.

Dr. H. A. Pattison, who was appointed to our staff last summer, has been especially entrusted with the execution of the war program. In this capacity he has visited practically all of the principal training camps in the United States and has had numerous conferences with military and civilian authorities relative to the problems involved. The program thus far developed has been worked out after such conferences and after a study of the campaigns of similar organizations.

While the exhibit was originally prepared only for use in the camps, demands from those who have already seen it have been so large that it has been decided to make the exhibit available in poster form for use among the civilian population. The illustrations and text of the exhibit are both designed to meet the needs of the soldier, but because of the present popularity of the soldier they can be used fully as well in the civilian population.

### 3. COÖPERATION AT WASHINGTON.

The necessity for coöperation between the federal medical and public health officers and the national associations interested in public health has never been so strongly emphasized as during the past year. The legislative committee of the National Association, of which Mr. William H. Baldwin of Washington is the chairman, has been of service to the office of the Surgeon General and to other groups in promoting interest in various bills and regulations designed to promote directly or indirectly the interest of the tuberculous soldier.

A program of this character will necessarily change from time to time. It has already been changed a number of times in the last few months. A recent decision of the Surgeon General to retain under his

control all men who are disabled by wounds or disease until they have recovered their health as far as it is possible to recover it will materially effect the follow-up program at least in the immediate future. The problem of the tuberculous soldier, however, will be one that the health agencies, private and public, will have to deal with for many years to come.

N. B. The outline of the war program as here given is lacking in details. The writer greatly regrets his inability to be present at the Conference of the State and Provincial Boards of Health.

### CONTINUED REPORT OF COMMITTEE ON SANITARY POLICY.

DR. HAYNE, *South Carolina*: As chairman of your Committee I would like to submit some resolutions for discussion. Of course, as your Committee we can bring in a report if you so desire, but we want these resolutions discussed, not as Committee resolutions but as a tentative program or plan to be discussed. They are as follows:

#### RESOLUTIONS FOR COÖRDINATING STATE BOARDS AND DEPARTMENTS OF HEALTH WITH THE OFFICE OF THE SURGEON GENERAL OF THE UNITED STATES ARMY.

WHEREAS, in the application of the volunteer principle in military organization, all concerned and prompted by their self-respect and their duty to their country at this time must lay aside, amid the conflicts of military and civilian claims for service, their own judgment and preferences and defer to the judgment and wishes of those charged with the responsibility for military efficiency, and

WHEREAS, our country has adopted the volunteer principle for securing a large force of medical officers for our army, and

WHEREAS, in conformity with the aforestated preambles, the medical profession of the country is so depleted that state health agencies are not only finding it impossible to secure additional medical officers, but are finding it impossible to hold even the small force that has not yet applied for commissions in the army, and

WHEREAS, this large demand on the medical profession for medical officers is resulting in a conflict of interests, a competition between the various state health agencies and our army for which the army is in no way responsible, and which is contrary to the larger interest of our

country and which is causing great disorganization among state health agencies, and

WHEREAS, the medical service of the army and the state health agencies are in fact, and should be in practice, coördinate, working with the fullest understanding, and in closest harmony for the protection of the health of the military and civilian population, and

WHEREAS, the aforesaid competition and conflict of interests is due to the absence of some central coördinating authority responsible alike for maintaining the health of the army and the health of the civilian population, upon which the health of the army largely depends, and

WHEREAS, the office of the Surgeon General of the army affords a means and affords the only means for centralizing and coördinating these closely related, mutually dependent agencies; therefore be it

*Resolved*, that the Conference of State and Provincial Board of Health of North America request and urge the President of the United States to designate the Surgeon General of the army to accept responsibility for maintaining the integrity and efficiency of any state health agencies signatory to these resolutions during the period of the war, and be it further

*Resolved*, that in the event the President of the United States shall designate the Surgeon General to accept the aforesaid responsibility, the state health agencies signatory to these resolutions do hereby agree to bring their entire executive staffs under the control and the direction of the Surgeon General of the army by requiring every member of their executive staffs to apply for and accept, in case it is granted, a commission in the Medical Reserve Corps of the army, or some other subdivision of the army under the Control of the Surgeon General.

The reason for this is very plain to me. There is but one agency in the United States that can put the boards of health on a status of military service, and that is the status that every man in the United States wants to be on at present. If he cannot acquire a military status because of being too old, or because he has heart lesions, that is his misfortune, but it is his desire to be on military status at the present time and subject to the orders of the War Department. We cannot get a military status from any source in the world except the War Department and the proper person in the War Department is the Surgeon General of the army. These resolutions are introduced for the purpose of discussion and we will be extremely glad if there is any other plan that can suggest itself to the minds of any state health officer by which he can obtain

a military status except through the War Department of the United States government.

THE SECRETARY: I see that Mr. Hoffman is with us now. He has considered this subject very thoroughly and I think we will be glad to hear what he has to say.

MR. HOFFMAN: I feel rather reluctant to give expression to my views at this time on so important a question as is raised by Dr. Rankin's resolution. I do not recall in my rather long experience a more far-reaching suggestion aiming virtually at the federal control of state and local health organizations. The resolution suggests a revolutionary change on account of existing conditions, the seriousness of which cannot be clearly recognized by the public at large. From all over the country come the reports that the organization of local health boards is being depleted by the withdrawal of the younger medical men who have entered or are going to enter the Medical Branch of the army. It is self-evident that no man in the state or local health service who values his future reputation can afford to take the risk of his non-entry into the medical service of the army at this time being misconstrued as a want of patriotism, though, in fact, he may be making the larger sacrifice to serve the imperative needs of the people at home. Every one must sympathize with the many health officers who are serving the nation and the government as much in their civilian capacity at home as are the men who have gone into the service and are now on military duty at home or abroad. The Surgeon General of the army alone is in a position to control what is likely to resolve itself into a deplorable state of affairs. Health officers cannot be expected to bear the stigma of a want of patriotism, and they cannot be prevented from entering the service, however serious the consequence to the localities and the states. The difficulty cannot be met by the Surgeon General of the Public Health Service, who has not the power to confer the army status upon civilian employees. There are other reasons which would make it extremely inopportune at the present time to transfer the State Health Service to the Public Health Service; but the same objections would not lie against such a transfer to the army medical authorities as a matter of imperative emergency legislation. Many activities are being transferred to the army and the navy for



the duration of the war without any serious apprehension as to the future. This applies to the railways, telegraph lines, express companies, etc. It would seem entirely feasible to work out a similar plan regarding the temporary transfer of the State Health Service to the Army Medical Department. If that could be done every state sanitary officer would have a military status and his connection with the government in the efficient conduct of the war would become a matter of official record. On general principles I would be opposed to such a transfer, firmly believing that this country is entirely too large and too varied in its conditions and activities to permit of the direction of a thoroughly effective local health administration from Washington. I am rather of the opinion that the state health organization should be strengthened in every possible way even to the extent of a joint federal appropriation. In these perilous times, however, I see no other solution of the present difficulty than the adoption of the resolution now before this body and which represents the mature thought and large experience of one who deservedly ranks as one of the leaders of the public health movement in this country at the present time. I personally have given the matter much thought and I am convinced that the suggestion is a move in the right direction. I believe it may safely be passed as an emergency measure and as a temporary transfer of authority to the one man, Major-General W. C. Gorgas, who by common-consent ranks as the foremost sanitary administrative officer of his time.

DR. RANKIN, *North Carolina*: I have been embarrassed, like all the rest of you, for about a year concerning what to do in regard to fulfilling my military obligations to my country. I finally came to the conclusion that the country having adopted this plan of voluntary medical service that that principle did not leave it to the individual to determine his place of service on grounds of greatest usefulness, but that the whole principle of volunteer service which the President is using through the Council of National Defense means that a man must waive his own judgment and leave the decision to the authorities of his country that are charged with the responsibility of its military efficiency. That is the volunteer principle.

I applied for the Medical Reserve Corps. I straightened out my official affairs. I went to

the International Health Commission with whom the state is connected in its health work. I wanted to arrange for the continuance of their work in North Carolina. I told them the object of my visit and the first thing they said was this: "We have just come back from the state of Virginia. The Health Commissioner of Virginia is on the verge of entering the service himself. He has lost about three-fourths of his force." These and other instances of disrupted staffs were described to me. I know Dr. Bracken has lost some of his men and from all quarters I heard that this same thing was going on. State health officers are absolutely unable to obtain new men for new work. They cannot retain their present forces. Practically all the men we want to hold are the very types of men that are going to see to it that their record is clear so far as their obligations to their country are concerned. They are going to go where they can receive a military status. That is the cause of all this disintegration. The men in the state boards of health are going into the army because they are determined to have a military status.

There is a conflict of interest, to a certain extent a competition between the army and every state board of health, a competition for which the army is in no way responsible. How are you going to remove a conflict between two separate agencies? How has it always been done? By putting in some central authority and control responsible for both agencies. There is no other way of doing it. In other words, the state boards of health and the army must have a common head responsible alike for the maintenance of the integrity of both forces. You say why don't you put them under the Council of National Defense? That would not do any good. They can give no military status. Where can you put them that will satisfy this demand on the part of patriotic men for military service except under the army? Now about the Public Health Service? That organization occupies almost an identical position with state boards of health so far as a military status is concerned. There is only one place for state boards of health and that is under the army.

Now what will be the effects of having the Surgeon General of the army responsible for the integrity and efficiency of state health

boards? Here is what will happen. The Surgeon General of the army will be responsible for state boards of health, for their integrity and efficiency. If he finds any man in any state board of health which has signed these resolutions essential to the army, he ought to take him. I presume the man will want to be taken and that his board will want him to go. If he takes my laboratory man, a man will have to be substituted for him. The Surgeon General takes the responsibility. If I go into the army, two or three years from now instead of having a disorganized body we shall find one twice as strong, because when we go to the Legislature for assistance we will make our appeal not only on behalf of the state but on behalf of the army, and legislatures will listen. This arrangement will enable the Surgeon General to lay the foundation for a national department of health. He will begin to coördinate health agencies. He will attempt to centralize, for example, the production of typhoid vaccine. It can be made in one place. The money that the various states are spending can be spent to meet some more important demand, and so with the educational work.

DR. McCULLOUGH, *Ontario*: The situation in Canada is exactly the reverse of that in the United States. In Canada there are certain matters which are left to the Province. They are well defined. Everything else belongs to the Dominion. As I understand it, it is the exact opposite with the United States. We have been four years at war, and the Interior Health Department is perhaps the strongest and best-organized department in Canada. Since the war began we have been able to carry on very well, despite the fact that a large proportion of the officers of our corps have gone overseas. Two of the district officers of health have been overseas since the beginning of the war. Three others have been in uniform doing what work they could in Canada. The director of our laboratory has been overseas since the early days of the war. We have four engineers who have left us. In the Registrar-General's Department a large number of our men have gone. What have we done to carry on the work? We have not only been able to carry on the work with a certain degree of efficiency, but we have provided all the vaccine used by our Canadian forces. We were the only agency in Canada

with the means to do this work, and we have provided a quantity of this vaccine to the Provincial Department free of charge.

We have carried on our work by using men who are not able to go to the front. For example in our laboratory when a man leaves, we take up some man with some sort of disability which keeps him out of the army and train him. We employ women in our work. In the Registrar-General's office we have had a hard problem to face recently. We adopted conscription, as you know. Until some months ago the entire service in Canada was voluntary, but a conscription law was passed taking men from twenty to thirty-four years of age, and more recently another call has been made whereby men from nineteen to twenty-three are taken. The result of that was that there came a heavy demand on the Registrar-General's Department to furnish birth and marriage certificates, because any man of military age might be picked up on the street by the police if he didn't have his birth or marriage certificate with him.

We received from 17,000 to 20,000 requests for certificates per day. We put a large number of girls and wounded soldiers on this work. We have three shifts of workers carrying on the work continuously, and in that way can handle it. I don't know whether you can manage in your country in a similar way. We have to. I should advise you to employ and train for your work smart young women, and to carry on.

## SESSION ON THURSDAY MORNING.

*June 6.*

The Conference was called to order at quarter of ten by the President.

THE PRESIDENT: There is with us at the Conference this year the Hon. W. D. McPherson, provincial secretary of the province of Ontario, and I am sure it will be an honor to have a few words from him this morning.

MR. MCPHERSON: Mr. President, this is an unexpected pleasure. I came here with Col. Dr. McCullough who is the chief officer of health of the province of Ontario, to hear the discussion of some of the problems with which you find yourselves confronted in the course of your various administrations, and found the discussions and papers presented yesterday of much

interest. Health problems are not confined to any particular country. They are common not only to the United States and Canada, but, with some variations, to all parts of the world, and if there is any gathering which should be of a fairly cosmopolitan nature it is the meeting of men who occupy official positions such as those occupied by the men comprising the membership of this association.

Health matters in Ontario are under the jurisdiction of what is called the Provincial Board of Health, comprised of seven members, of which Col. McCullough is the secretary and chief executive officer. The province is divided into seven districts and we have altogether about 838 municipalities. Some of these municipalities are rather sparsely settled and it is not an uncommon thing in some portions of the country for a health officer to have two municipalities under his jurisdiction instead of one. We think we have made excellent progress; health affairs in the province of Ontario are in a comparatively satisfactory condition, and with the assistance of skilled men such as Dr. McCullough everything is going on very well indeed.

It is an especial pleasure, Mr. President and gentlemen, as one interested in the public life of Canada, to come to the capital city of the United States of America at this particular juncture in your and our public affairs. In 1914 I had the pleasure and privilege of presiding over a very large meeting at Niagara Falls in Ontario designed to celebrate one hundred years of continuous peace between the British Empire and the United States of America. On that occasion there were present a very large number of prominent men from Canada and the United States. I presume that we had representatives of probably 50,000,000 people from the United States in addition to delegations from every province in the Dominion of Canada. We celebrated the 100th anniversary of unbroken peace between our respective countries without the slightest idea at that time that within a period of three weeks the British Empire, in common with her European allies, would be involved in the greatest conflict the world has ever seen.

From August, 1914, until the present time, the soldiers of the British Empire have been engaged in that conflict. Every interest in our country has been diverted and practically sub-

jugated to the one and single thought of how best to win that war in the interest of liberty, justice and civilization.

We now have the proud distinction of being associated for the first time in our national history with your great republic in that same endeavor. On the occasion to which I have referred I gave utterance to the hope and sentiment that if ever the banners of Britain and the United States should meet upon the battlefield they should go forward side by side to relieve the oppressed, to succor the injured, and to carry forward the great principles of justice, liberty and civilization. Gentlemen, that moment has arrived, for today upon the battlefields of Europe the choice flower of the young hope of the United States of America fight shoulder to shoulder with their cousins of the British Empire and with our esteemed French and Italian allies and the others associated with them. •

At this moment the interest of the whole world is centered in the result of this conflict. Nothing more important in my opinion can possibly arise for consideration in connection with that struggle than the conservation of the strength and health of our military and civil population in face of the enemy. Public health is one of the greatest desiderata and there are none more greatly interested in that subject than the gentlemen whom I have at the moment the honor of addressing. Whatever we can do, whatever you can do in furtherance of this great object will, I am confident, be cheerfully done. We know not what the future may possess for us, but I am sure we shall be able to do something for the world in larger measure and with higher aims and objects than if we had remained unallied.

THE PRESIDENT: On behalf of the Conference I wish to thank Mr. McPherson for his talk to us.

#### DEATH RETURNS.

DR. DAVIS, *Texas*: In Texas we have experienced considerable difficulty in securing complete records of the deaths of citizens which occurred in other states. An endeavor was made to secure such data relative to soldiers' deaths through the Surgeon General's office and from the Bureau of the Census. Conditions were such, however, that it was not possible to secure this information through these sources, and in accordance with a resolution passed by

the Texas State Board of Health on April 15, 1918, a letter was sent to the Texas state registrar requesting him to furnish a copy of all certificates of soldier deaths occurring in Texas to the state registrar of the state in which the soldier had residence. A letter was also sent to each state registrar through the country and each state health officer asking that a reciprocal arrangement of this sort be made. The Bureau of the Census approves of this plan as outlined. I would like to present the following resolution relative to this matter:

WHEREAS each state is entitled to a complete record of the deaths of its citizens, and

WHEREAS transcripts of deaths are not sent to the Census Bureau of all states, and

WHEREAS the War Department is not in position to furnish each state with such records, therefore be it

*Resolved*, That the state registrars of the sev-

eral states and territories be requested to forward an authorized copy of all certificates for soldier deaths to the registrar of the state of which such soldier was a resident.

The resolution was referred by the President to the Committee on Resolutions.

DR. TUTTLE, *Washington*: I have listened to the very interesting talk of our associate from Canada and I wish to move you that we reconsider the action taken by this Conference yesterday afternoon in the matter of the change of name of this Conference. I do not see how we can conscientiously and justly strike the Provinces from the name of this association.

Dr. Tuttle's motion for reconsideration was seconded and carried, and it was subsequently voted that the title of the association be changed to "Conference of State and Provincial Health Authorities of North America."

## REPORT OF COMMITTEE ON PROGRESS OF FULL-TIME DISTRICT HEALTH OFFICER LEGISLATION.

PRESENTED BY C. ST. CLAIR DRAKE, M. D.,  
*State Director of Public Health, Springfield, Ill.*

QUESTIONNAIRES sent out by your committee on May 14th to all of the states in the Union were returned with more or less definite information by forty states. The states that failed to respond were Arkansas, Mississippi, New Hampshire, New Mexico, North Carolina, Oregon, South Carolina, Tennessee, and Virginia.

The essential points covered by the questionnaire were the following:

Whether or not new legislation had been passed relative to full-time district health officers and if so, the character of the new laws; the extent to which full-time district health officers are already employed; the details of their employment and the character of health officers service in those states in which the district health officer plan is not in operation; proposed or pending legislation relative to full-time district health officers and the character of such

proposed legislation; progress which has been made in the several states looking toward full-time district health officers, but carried out without specific legislation; comments or opinions on the district health officer plan and notes or information which might be of interest to this conference.

Of the forty states which returned questionnaires six reported legislation within the past two years. These were California, Connecticut, Illinois, Kentucky, Maine, and Wisconsin.

In California through a resolution of the board in 1917 the state was divided into six districts each with a full-time medical health officer appointed through competitive examination conducted by the United States Public Health Service. The salary for district health officer was \$3,000 per year and expenses.

In Connecticut a statute enacted in 1917

authorized the consolidation of local health jurisdictions to form districts for the employment of full-time medical health officers.

In Illinois the sanitary health district act in 1917 permits the joining together of townships, cities, villages, and other contiguous civil jurisdictions to combine for the creation of sanitary districts each of which must have a full-time district health officer chosen by competitive examination conducted by the State Department of Public Health. The minimum compensation for such officer is \$1,500 per year.

The provisions of the new Kentucky law as reported in the questionnaire were not sufficiently definite to use as the basis for a statement.

In Maine the act of 1917 provides for the division of the state into three or more districts each with a full-time medical health officer with salary not to exceed \$2,500 per year.

The law of 1917 in Wisconsin permits cities, villages, and townships to unite to employ health officers who are apparently not necessarily full-time health officers, but who are not to allow other business to conflict with their duties.

Briefly, then it may be said, that within the past two years six states have enacted new laws looking toward full-time district health officers. The states of California and Maine providing for the division of the state into several sanitary districts while the new laws of Connecticut, Illinois, and Wisconsin permit the combination of existing public health jurisdictions to unite into districts for the purpose of employing full-time health officers. It will be borne in mind that the full-time district health officer plan has previously been in operation in other states under the authority of older laws. As for example in the states of Florida, Illinois, Maryland, Massachusetts, and New York, thus it is seen that seven states of the forty reported have legal

provision for full-time district health officers under state control and covering the entire state.

In reply to the inquiry as to the states already having full-time district health officers employed, nine replied in the affirmative. In Florida, Illinois, Maine, Maryland, Massachusetts, New York, and Wisconsin the district health officers service covers the entire state. In Louisiana there are two instances in which parishes and cities have united to create health officer districts. While not exactly applying to this report, it is interesting to note that the state of Alabama has eight full-time county health officers with salaries ranging from \$2,000 to \$4,000 per year.

The District of Columbia reports that all health officers and employees are required to work seven and one-half hours per day, but may have other employment not connected with those lines of business or industry with which the Department of Health must deal.

The questionnaire raises the question as to the system now employed in the several states and as to whether or not it is satisfactory. Twenty states replied to this question, sixteen definitely stating that the present plan is entirely unsatisfactory. In most instances it was found that the health officers of the state were employed by counties, cities, and townships, that for the most part they were full-time employees with thoroughly inadequate compensation.

In sixteen states legislation looking toward the employment of full-time district health officers is in contemplation. In Connecticut, Kansas, Louisiana, Nebraska, Ohio, Utah, Vermont, and Washington the legislatures will be asked to establish the district health officer system. In Illinois and Wisconsin an effort will be made to increase the number of sanitary or health districts. Indiana will not urge the district health officer plan, but rather full-time medical health officers for all counties with a

population over 10,000 and full-time municipal officers in cities of over 20,000. Louisiana will ask for district health officers and will also consider a proposition of dollar for dollar contribution by the state for the support of full-time local health officers.

Michigan will consider legislation providing for full-time county health officers.

The replies to the inquiry as to what progress is being made in the various states toward the establishment of the district health officer system without specific legislation therefore were rather vague and unsatisfactory. In Connecticut a health district incorporating twelve towns in New London County has been created through the joint efforts of the United States Navy and the United States Public Health Service.

In Montana there is one instance of a combination of city and county for the employment of a full-time health officer, while there are a number of such instances in Pennsylvania.

It is interesting to note that Massachusetts has added a nursing assistant to each of its district health officers. In most instances the questionnaire stated an increasing tendency toward the employment of full-time medical health officers.

All states to which the questionnaire was sent were asked to express their opinion of the full-time district health officer plan and twenty-one replied. Fourteen strongly commended the plan. The reply from Arizona suggested that the plan should be carried out jointly by State and Federal Government. California stated that the

district health officer plan was particularly effective in stimulating the efficiency of local health officers. Indiana offered no comment on the district health officer plan, but stating a preference for the county as a unit. Maryland, whose forces of district health officers has been reduced 50 per cent on account of inability to secure more officers, suggested that efficiency can be improved by the employment of promising medical students.

In Nebraska the chief obstacle seems to have been to secure the appropriation of adequate salaries.

From Ohio came the opinion that district health officers were valuable only to supervise efficient local health organizations; while Oklahoma expresses the Opinion that there should be both full-time district health officers and full-time county health officers.

The opinion expressed by Rhode Island was that that state was too small for the application of such plan. From West Virginia came the suggestion that the money to carry out the plan should come from the counties constituting the districts and not from the state.

From these questionnaires your committee is inclined to believe that the statement from Wisconsin may be accepted as sound: "that the plan is perhaps the most effective that has been suggested up to the present time and needs only trial to be convincing."

The strongest expressions of approval came from those states in which the plan had been placed in operation.

## SUMMARY OF NEW LEGISLATION.

STATE.	NEW LEGISLATION.	PROVISIONS.
1. ALABAMA	No	
2. ARIZONA	No	
3. CALIFORNIA	Yes	Through resolution of board, July, 1917, six districts in state were created with full-time health officers appointed by competitive examination given by United States Public Health Service; salary, \$3,000 and expenses
4. CONNECTICUT	Yes	Law passed May, 1917, to consolidate local health jurisdictions to form districts for full-time health officers
5. COLORADO	No	
6. DELAWARE	No	
7. DISTRICT OF COLUMBIA	No	
8. FLORIDA	No	
9. GEORGIA	No	
10. IDAHO	No	
11. ILLINOIS	Yes	Law of 1917 provides sanitary health districts with health officers appointed by examination given by State Department of Public Health
12. INDIANA	No	
13. IOWA	No	
14. KANSAS	No	
15. KENTUCKY	Yes	Indefinite
16. LOUISIANA	No	
17. MAINE	Yes	Law of April, 1917, provides for three or more districts, each having full time health officer with degree of M. D.; salary not to exceed \$2,500
18. MARYLAND	No	
19. MASSACHUSETTS	No	
20. MICHIGAN	No	
21. MINNESOTA	No	
22. MISSOURI	No	
23. MONTANA	No	
24. NEBRASKA	No	
25. NEVADA	No	
26. NEW JERSEY	No	
27. NEW YORK	No	
28. NORTH DAKOTA	No	
29. OHIO	No	
30. OKLAHOMA	No	
31. PENNSYLVANIA	No	
32. RHODE ISLAND	No	
33. SOUTH DAKOTA	No	
34. TEXAS	No	
35. UTAH	No	
36. VERMONT	No	
37. WASHINGTON	No	
38. WEST VIRGINIA	No	
39. WISCONSIN	Yes	Law of July, 1917, permits cities, villages, and townships to employ health officer, said officer to allow no other business to conflict with his duties
40. WYOMING	No	

## PRESENT METHODS.

STATE.	FULL-TIME NOW EMPLOYED.	DETAILS.	SYSTEM NOW EMPLOYED.
1. ALABAMA	8 County	1914: Two at \$4,000, three at \$3,000; two at \$2,000; satisfactory in six; untrained men in two	Part-time county; unsatisfactory
2. ARIZONA	None		Part-time; unsatisfactory
3. CALIFORNIA			
4. CONNECTICUT	None		Part-time; lawyers; unsatisfactory
5. COLORADO	None		
6. DELAWARE	None		Local boards; satisfactory
7. DISTRICT OF COLUMBIA	All employees	Employees must work seven and one-half hours; may do other work not connected with health	
8. FLORIDA	8 Districts	In July, 1917, eight district health officers with salary of \$2,500 and 10 per cent increase in one year	
9. GEORGIA	Not stated	Law of 1914 provides for full-time health officer for county or counties recommended by state board of health	
10. IDAHO	None		County and municipal; unsatisfactory
11. ILLINOIS	6 Districts	State divided into six districts, each with a full-time M. D.; salary of \$1,800 and expenses	Part-time; unsatisfactory
12. INDIANA	None		
13. IOWA	None		City, town and township health officers; unsatisfactory
14. KANSAS	Yes	Two extra-cantonment zones; one county and one city	Part-time county; unsatisfactory
15. KENTUCKY	No		Indefinite
16. LOUISIANA	Two	Working for parish and city jointly	
17. MAINE	Yes	Three districts organized	
18. MARYLAND	10 Departments	Ten departments of state health officers authorized; eight employed, reduced to five on account of war	
19. MASSACHUSETTS	8 Districts	Eight full-time district health officers with limited powers, being entirely advisory; salaries \$2,000 to \$3,500	
20. MICHIGAN	No		City, village and township health officers; not satisfactory
21. MINNESOTA	No		County, city and township health officers; not satisfactory



STATE.	FULL-TIME NOW EMPLOYED.	DETAILS.	SYSTEM NOW EMPLOYED.
22. MISSOURI	No		
23. MONTANA	No		Part-time city and county health officers; unsatisfactory
24. NEBRASKA	No		City and county health officers; unsatisfactory
25. NEVADA	No		
26. NEW JERSEY	No		
27. NEW YORK	15 sanitary supervisors	Law of 1913 authorized twenty district sanitary supervisors at salary of \$3,000 and expenses, and with general powers	
28. NORTH DAKOTA	No		Part-time county and city health officers
29. OHIO	No		Township, village and city boards; 2,141 jurisdictions; unsatisfactory
30. OKLAHOMA	No		Part-time county health officers, per diem; unsatisfactory
31. PENNSYLVANIA	No		
32. RHODE ISLAND	No		Full-time local health officers; not all medical
33. SOUTH DAKOTA	No		
34. TEXAS	No		
35. UTAH	No		Local, town and county health officers; unsatisfactory
36. VERMONT	No		Local health officers only
37. WASHINGTON	No		Local health officers; political appointees; unsatisfactory
38. WEST VIRGINIA	No		County boards with a health officer, salary \$100; unsatisfactory
39. WISCONSIN	5 Deputy health officers	In 1913 there were five deputy health officers with salaries of from \$2,400 to \$3,000 and expenses	
40. WYOMING	No		

## PENDING LEGISLATION.

STATE.	LEGISLATION PENDING.	CHARACTER.
1. ALABAMA	No	
2. ARIZONA	No	
3. CALIFORNIA	No	
4. CONNECTICUT	Yes	Four district medical health officers to be known as deputy commissioners
5. COLORADO	No	
6. DELAWARE	No	
7. DISTRICT OF COLUMBIA		
8. FLORIDA	No	
9. GEORGIA	No	
10. IDAHO	Yes	Not fully prepared
11. ILLINOIS	Yes	Complete revision of sanitary code including district health officers and municipal health organizations
12. INDIANA	Yes	Full-time county medical health officers in counties with population over 10,000 and city health officers in cities with population of over 20,000
13. IOWA	No	
14. KANSAS	Yes	Providing for not more than thirty full-time district health officers to be paid by district
15. KENTUCKY	Yes	Indefinite
16. LOUISIANA	Yes	Providing for eight district health officers; also dollar for dollar of state money for local full-time health officer
17. MAINE	No	
18. MARYLAND	No	
19. MASSACHUSETTS	No	
20. MICHIGAN	Yes	Providing for full-time county health officers
21. MINNESOTA	No	
22. MISSOURI	Yes	Indefinite
23. MONTANA	Yes	
24. NEBRASKA	Yes	Providing for six full-time district health officers
25. NEVADA		
26. NEW JERSEY	No	
27. NEW YORK	No	
28. NORTH DAKOTA	No	
29. OHIO	Yes	Providing for twelve full-time district health officers
30. OKLAHOMA	No	
31. PENNSYLVANIA	No	
32. RHODE ISLAND	No	
33. SOUTH DAKOTA	No	
34. TEXAS	No	
35. UTAH	Yes	Providing for full-time district health officers
36. VERMONT	Yes	Providing for eight full-time health officers.
37. WASHINGTON	Yes	Provides for full-time health officers
38. WEST VIRGINIA	No	
39. WISCONSIN	Yes	Will increase number of district health officers
40. WYOMING	No	

## PROGRESS AND COMMENTS.

STATE.	PROGRESS WITHOUT LEGISLATION.	COMMENT ON DISTRICT HEALTH OFFICERS' PLAN.	INFORMATION.
1. ALABAMA	Popular protest against untrained men	None	None
2. ARIZONA	None	Should be handled jointly by State and Federal Government	None
3. CALIFORNIA	None	Working well to encourage efficient work by local health officers	None
4. CONNECTICUT	District working jointly with Navy and United States Public Health Service incorporating twelve towns in New London County	Favorable to district health officer plan	None
5. COLORADO	State board has full-time medical inspector	None	None
6. DELAWARE	None	None	None
7. DISTRICT OF COLUMBIA	None	None	None
8. FLORIDA	None	None	None
9. GEORGIA	None	None	None
10. IDAHO	None	Approves district health officer plan	None
11. ILLINOIS	Organization Division of Social Hygiene. Promulgation rules for control of venereal diseases. State and County Collaborating Health Service organized; County medical society designates one of most competent members to act as local representative for State Health Department; on assignment acts in emergencies; conference at least once yearly to consider advances in preventive medicine.	Working satisfactorily	
12. INDIANA	None	Prefer county as unit	None
13. IOWA	None	Should be a uniform law re: full-time health officer	None

STATE.	PROGRESS WITHOUT LEGISLATION.	COMMENT ON DISTRICT HEALTH OFFICERS' PLAN.	INFORMATION.
14. KANSAS	Health organization in two extra cantonment zones and in one county and one city	None	None
15. KENTUCKY	None	None	None
16. LOUISIANA	State board appointed full-time school inspector and director, venereal diseases	In thorough accord with plan	None
17. MAINE	None	None	None
18. MARYLAND	None	Efficiency can be improved by employing medical students; doctors hard to get	None
19. MASSACHUSETTS	Steady increase in municipal full-time health officers; have added nursing assistance to each district health officer	None	None
20. MICHIGAN	Increase in number of city full-time health officers	None	None
21. MINNESOTA	Only a few cities have full-time health officer	Anxious to reorganize on county or district plan	None
22. MISSOURI	None	None	None
23. MONTANA	One county and city united for full-time health officer	None	None
24. NEBRASKA	None	Salaries must be adequate	No health officer should have to depend on private practice
25. NEVADA	None	None	None
26. NEW JERSEY	None	Fully approved	None
27. NEW YORK	Effort to secure more full-time health officers	Very effective	None
28. NORTH DAKOTA	None	Have advocated plan for several years	Every county and every city should have full-time health officer where population is over 10,000
29. OHIO	None	District officers valuable only to supervise efficient local organizations	Believe health work outside cities could be put in hands of nurses
30. OKLAHOMA	None	Should have both full-time district and county health officers	None

STATE.	PROGRESS WITHOUT LEGISLATION.	COMMENT ON DISTRICT HEALTH OFFICERS' PLAN.	INFORMATION.
31. PENNSYLVANIA	Counties and cities combining for full-time health officer	None	None
32. RHODE ISLAND	None	State too small for such plan	None
33. SOUTH DAKOTA	None	None	None
34. TEXAS	None	None	None
35. UTAH	None	Thoroughly approved	None
36. VERMONT	None	None	None
37. WASHINGTON	None	None	None
38. WEST VIRGINIA	No full-time health officer in state	Good, if enough money—should be paid by counties	None
39. WISCONSIN	Established six state co-operative laboratories	Plan so far most effective; needs only trial to be convincing	None
40. WYOMING	None	Favors plan	None

## DISCUSSION.

DR. KELLOGG, *California*: I would like to ask if this Committee has had under consideration the advisability of employing lay health officers for this sort of work, that is, trained laymen.

DR. DRAKE, *Illinois*: I imagine that there would be a good deal of difficulty in that procedure. In most of the states, the medical practice act prohibits such service. It might be possible in some of the states. It would not be possible in Illinois because the service of such a man is of such a nature that he would be acting in violation of the medical practice act. A good layman, however, could render some valuable service.

DR. FRANTZ, *Delaware*: What is the size of a district? what do you call a district health officer? What is the difference between a full-time county health officer and a district health officer?

DR. DRAKE, *Illinois*: A district health officer is a man serving with the state health department and having supervision over the local health authorities in districts of various sizes.

In Illinois we have six such districts. We need more, but we will come to that gradually.

DR. FRANTZ, *Delaware*: And under such a district health officer are the county and other health officials?

DR. DRAKE, *Illinois*: Yes, under his supervision. I might describe here, gentlemen, a little development in Illinois just recently which may interest you. We feel in Illinois that the greatest progress we can make in public health work is through the coöperation of the medical profession. We can't get any place of consequence without that coöperation. For the purpose of developing a closer coöperation between the medical profession and the State Department of Public Health we are starting what is known as the State and County Coöperating Health Service. We have addressed an invitation to the county medical society of each county asking them to delegate a good responsible competent man from their local organization to act as collaborating or local representative for the State Department of Public Health in their county. It is the purpose of the State Department of Public Health to use these local doctors in matters of emergency where we cannot get our own investigators on the ground in a short period of time, and to pay these men a per diem for their service. They are appointed for the purpose of keeping the State Department of Public Health in closer touch with the developments in their districts and in closer touch with the sentiment of the profession with respect to any new regulatory measures we may

be seeking to apply. They also come to Springfield once a year to the meeting of our Illinois Public Health and Welfare Association for the purposes of conference. Next October it is our desire to have a Conference of one or two days, as the case may be, especially devoted to a discussion of the newer problems in preventive medicine. By bringing these collaborators, good representative men from each county in the State, to these conferences, we hope to have them so informed that they can go back to their county societies and pass on to them the knowledge they have acquired in the quickest time and best possible way. I think this arrangement will be the means of bringing the department in close touch with the profession and enable us to do much more effective work than we are now doing.

DR. HITCHCOCK, *Massachusetts*: I want to say a few words about the nursing assistants we are getting in Massachusetts. The legislature this year provided us with sufficient funds to pay the salaries of eight nursing assistants, one to assist each of the district health officers. We felt that we could nearly double the efficiency of the district health officers by such a plan. That is based on my own personal experience as a district health officer. For a number of years I have had what was practically such an assistant. When I left private practice I kept on at my own expense a nurse who had been with me. I found that as she worked into the activities of my office, helping me with the files and office work, that she gradually took over the handling of the district nurses and the handling of cases which were difficult from the personal side. Her value to the department was evident and definite, so this year we have started getting similar assistants for the men. Such an assistant is a valuable addition to the efficiency of the district health officer. A woman of years, brains, training and understanding can do many things that the district health officer cannot do.

DR. KELLOGG, *California*: In the report which the California State Board of Health made to the Committee on this subject there is one feature which was not mentioned as from the questionnaire sent out by the Committee it did not seem that that point was covered, but from the discussion I find that the matter, the formation of local health districts, is being considered. I want to describe a new law re-

cently passed in California which provides for the formation of local health districts. This is an enabling act which permits communities, either several towns or a whole county with incorporated towns in it and the rural territory outside the town, to combine and form a health district which will be governed by a board of trustees to consist of one delegate from each community in the district. Then it is required by the law that a full-time district health officer be employed, and it is further required that he shall be a graduate in public health or a sanitary engineer. This is a new law so that no district has yet been actually completed, but several are under way and we are expecting that the administration of public health work in communities will be greatly improved in this manner.

DR. HARPER, *Wisconsin*: I might add a word about the district health officer work we are doing in Wisconsin. We have five districts with a full-time man in each district. We have established a public health laboratory in each one of the five districts. These public health laboratories we call coöperative laboratories. The state pays a thousand dollars per year towards the salary of the directors, selects the directors and supervises the municipalities in which these laboratories are established. The establishment of a laboratory in a municipality is determined by the State Board of Health so that they are distributed, so to speak, over the state in such a manner as to make one or the other of these laboratories more or less adjacent to all the medical profession in the state. The community having one of these state-assisted laboratories must employ a full-time health officer for that community. Now such a laboratory is not only a laboratory for the municipality but a laboratory open to all the state. Realizing also, as Dr. Drake has said, that the success of public health work depends largely upon the hearty coöperation of the medical profession, the medical department of the University of the State of Wisconsin sends out men who hold clinics, so to speak, or to give instruction upon the newest points in medicine and the methods of procedure to the medical profession in the different localities, demonstrating for instance, the value of sera, antitoxins, etc., or the methods of obtaining material for laboratory examination.

Now this latter plan has only been in operation

for about a year but I can say this, that the attendance is comparatively large. The medical men are interested and we feel that they should be educated along these lines, particularly in certain districts of the state, and by this method we are taking the schools to them, rather than taking them away from their locality to a school to take up certain methods of procedure which can be readily demonstrated in their own section. With these laboratories we are getting the physicians interested more in the scientific

side of medicine and aiding them materially in diagnosing cases, particularly certain classes of cases which present difficulties. We feel that the laboratory proposition is as important in our state, fully as important as the district health officer proposition, which for us is working out very satisfactorily.

It was voted that the report of the Committee on Full-Time District Health Officer Legislation be accepted and placed on file and the Committee continued.

## VENEREAL DISEASES.

### THE PROGRAM OF THE WAR DEPARTMENT AGAINST VENEREAL DISEASE.

WM. F. SNOW, *Lieutenant-Colonel, Medical Corps, U. S. A.*

AND

W. A. SAWYER, *Major, Medical Corps, U. S. A.*

I. LT.-COL. SNOW.

**I** THINK my part in the discussion of this problem should be simply to introduce Major Sawyer and Doctor McLaughlin by a few remarks. In the development of the present campaign against venereal diseases some of us have played the part of the woodsman who is sent out into the mountains to mark a roadway. He goes over the mountain and, so far as he can, follows a straight course. In later years when the road begins to be extensively used, a surveyor follows the trail blazed out and says, "What a miserable trail! Why didn't he follow along the stream? With only a little blazing here and there he could have made almost a straight course." In defense of the fellow who went first it may be said that he could not see the stream all the time, or it looked to him at times as if the river made a big bend and it would be shorter to climb the mountain side.

The surveys have now been made and the scientific building has begun in earnest.

Since the advent of war last year we have seen more progress than in the last thirty years, during which people have steadily made efforts in this direction with increasing confidence in ultimately achieving success. So far as the government is concerned, its work has all been directed along three or four major lines. When I say the government I mean all of the departments of the government, because this is a problem which cannot be handled by any one department. The army has, of course, distinctly the largest problem because it has so many hundred thousands of our men under its control. The navy has a corresponding proportionate responsibility. The Public Health Service has the responsibility for the civilian industrial population. The American Red Cross has come forward in a splendid way to coöperate with these several agencies. The United States Bureau of Education is trying to reach boys graduating from the high schools who will be in the next draft. The United States Children's Bureau is going back into the

homes in a most effective way, making plans to reach the children who are now growing up to be the next generation of men and women who will rule this country. All these are just an extension of lines of coöperation, so that when we speak of the government we ought to include all these agencies.

The outstanding features of the practical problem which is presented to us are, first, the detecting of cases, second, the treatment of those infected. Besides providing facilities for treatment for those already infected, the government feels we ought to do all we can to educate and aid those who are not infected to protect themselves.

That brings us to the educational factor and all its ramifications. In every other

communicable disease, there are certain difficulties attendant upon an individual's applying the knowledge he has of protection from disease. None of us, for instance, who are susceptible to bubonic plague, can protect ourselves if we don't know that bubonic plague is in the city and we are being exposed. And even if we do know that fact, we cannot do a great deal to protect ourselves unless the health authorities and the collaborating agencies do something to aid us in the control of disease.

In venereal diseases we have essentially the same problem and are finding, as we deal with the venereal diseases from an epidemiological point of view, that public opinion is with us. The controversy between medicine and morals is not really controversial if we look at it squarely. It

## VENEREAL DISEASE IN U. S. ARMY.

WEEKLY INCIDENCE EXPRESSED IN TERMS OF ANNUAL CASE RATE PER 1000.

SEPT. 1917 — MAY 1918 INCL.

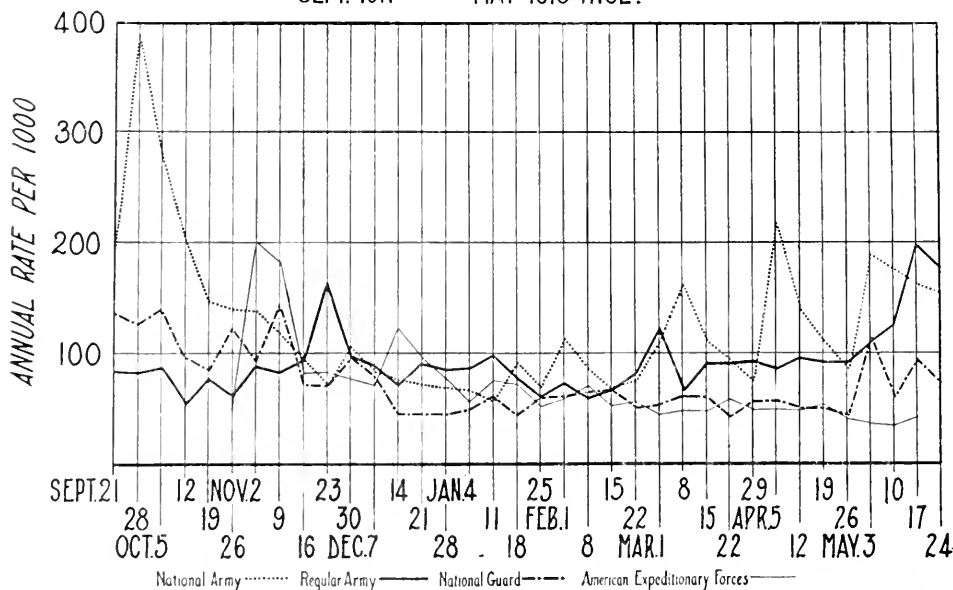


CHART 1. Annual venereal disease rates per thousand men in the National Army, Regular Army, and the National Guard, and Expeditionary Forces by weeks for the period from September 21, 1917, to May 24, 1918, incl.



is simply a question of utilizing a new type of public health machinery. Instead of using the sanitary engineer to drain a swamp as we do in malaria, we have to use the lawyer and the social worker in controlling liquor and prostitution and other evils. The analogy is scientific enough and the public is beginning to see it.

## II. MAJOR SAWYER.

MAJOR SNOW has spoken of the principles underlying venereal disease control. I shall exhibit a few charts which show the extent of the venereal disease problem in the army and which point out where, from the viewpoint of the army, the greatest emphasis should be placed in the control of these diseases.

The first chart shows the amount of venereal disease in the National Army, the National Guard, the Regular Army, and the American Expeditionary Forces from September, 1917, up to the present.

### RELATIVE INCIDENCE OF CERTAIN COMMUNICABLE DISEASES

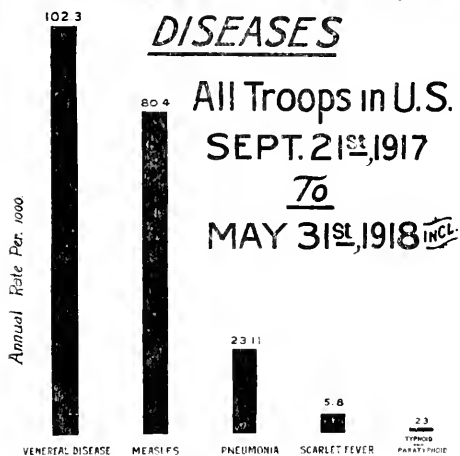


CHART 2. Comparison of the annual rates per thousand men for all troops in the United States between September 21, 1917, and May 31, 1918, of certain of the more important communicable diseases.

This chart gives an idea of the magnitude of the problem with which the army is dealing. It does not show how much venereal disease is being contracted by the soldiers, nor the exact percentage of the men having venereal disease at the time of admission to the army. The fluctuations vary principally with the number of new men admitted to the army, and therefore cannot be used to measure the success of preventive measures in or around the camps. The high points of the curves coincide with the large increments of drafted men.

In interpreting the curves it should be kept in mind that the figures represent the annual rate per thousand men figured for the given week. The annual rate must be divided by fifty-two to find the actual number of cases per thousand men reported for the first time during any week in question.

The second chart shows the incidence of venereal disease in the army, as compared to other important communicable diseases. As General Gorgas has said, venereal diseases present the greatest communicable disease problem of the war. They are the greatest single cause of disability in the army.

The third chart shows the amount of

### VENEREAL DISEASE INCIDENCE

before and after enlistment in 5 N.A. camps  
annual rate per 1000  
March 29 - May 24 incl

GONORRHEA 4200 242.3

SYPHILIS 1330 155.3

CHANCROID 100 134

TOTAL 5630 337.2

Before enlistment ☒ After enlistment ☐

CHART 3. Annual rates per thousand men, before and after enlistment, in five National Army Camps, Dix, Lee, Upton, Meade, and Pike, for gonorrhea, syphilis, chancroid, and total venereal disease, based on 37 special weekly reports from March 29th to May 24th incl.

venereal disease contracted after enlistment in five National Army camps, contrasted with the total amount. Figures for the whole army are not now available, and would probably not show quite so marked a contrast.

In these five camps there were about nineteen times as many cases contracted before enlistment as afterward. It is, therefore, the disease contracted by civilians before enlistment, under civil conditions, which is responsible for the disability due to venereal disease in the army. To reduce the small amount of venereal disease contracted after enlistment is the problem of the army. To cut down the vast amount brought in from civilian life is the problem before the state and local health officers throughout the United States. There is no greater or more urgent health problem before them today. To solve the whole problem, the army and the health officers will need to exercise the closest coöperation.

At the beginning of the war it was expected that conditions around the camps would become serious. The War Department Commission on Training Camp Activities was organized to prevent this, and it has received splendid coöperation from most communities. The activities of the commission have been a large factor in the low amount of venereal disease contracted after enlistment. For carrying on the work of preventing venereal disease through the enforcement of laws against liquor and prostitution, there has been organized a law enforcement division of the commission. This division has had assigned to it a corps of twenty-six officers of the Sanitary Corps of the army. They assist in the enforcement of Federal, state, and municipal laws against vice and liquor, with much emphasis on the repression of prostitution. This work, and the educational work carried on among the soldiers by the commission and the medical officers of the army, strike at the source of venereal disease and

have proven highly effective in those communities in which intensive work has been carried on owing to their special importance to the army. State and local health officials will have to take the lead in venereal disease control throughout the length and breadth of the nation, if big results are to be obtained and if the disability in the future drafts is to be materially reduced. The nation cannot afford to hand over to the army such a great burden of venereal disease arising needlessly in the civilian population.

Taking the country as a whole, very little can be done in venereal disease control except through the state and municipal officials, particularly the health officials. I am glad to say that the army's request for public health control of venereal diseases is getting a wonderful response from state and municipal health officials. When the Surgeon-General informed health officials of what was needed, the great majority were willing to assist to the fullest extent within the limits of their power.

The state boards of health are putting the control of syphilis and gonorrhea on a sound public health basis. In thirty-four states and one territory venereal diseases must be reported. In eight states the report is by name; in the remainder by physicians' office number. In twenty-three states and one territory these diseases are required to be quarantined when necessary to protect the public health. In eleven states separate bureaus of venereal disease have been established. In fourteen states and one territory, in which venereal diseases are required to be reported by office number, the name of the patient must be reported if he fails to continue treatment or to observe precautions to prevent spreading disease.

The quarantine of the venereal disease patient when necessary to protect the public health has proven practical and has doubtless already prevented many infec-

tions. Quarantine of all cases is not necessary and is distinctly impractical. The method which is becoming generally accepted is similar to that which has been advocated for tuberculosis, another chronic communicable disease. The incorrigible and dangerous patient is quarantined under proper treatment in a hospital, and kept from exposing others. In the control of venereal diseases, the method is more important than in the prevention of tuberculosis. The provisions for quarantine are the teeth in the venereal disease statutes and regulations.

Venereal disease control should be kept a matter of public health administration free from unnecessary court procedure.

The establishment of separate bureaus of venereal diseases by state boards of health puts these diseases in a class with tuberculosis, as far as special recognition is concerned. Venereal diseases as a group are more destructive and preventable than tuberculosis, and it is therefore right that they should receive attention from a special staff with special funds.

I have heard it said that we should be able to reduce venereal diseases by fifty per cent in a few years if the present program can become general and be efficiently

administered. I believe it is true, and that further reductions can be made in subsequent years, until syphilis and gonorrhea have reached an incidence as low as that of typhoid fever at the present time, or even lower. We know as much about venereal diseases as about the other preventable diseases. The laboratory part of the plan is well worked out. The methods of control are being successfully carried on in extra-cantonment areas. Why not in the rest of the country?

We have been dropping silver nitrate into the eyes of the babe to prevent gonorrheal ophthalmia, but we have been doing almost nothing to prevent the father or mother from contracting the original infection and bringing it into the home. It is only since the war began that we have considered relative values of the methods of controlling venereal diseases, and have recognized that we must get at the large sources and use law enforcement and educational measures to reduce prostitution and make the transfer of infection much less frequent.

The success or failure of venereal disease control depends on the vision and energy of the health officer.

## THE PROGRAM OF THE UNITED STATES PUBLIC HEALTH SERVICE AGAINST VENEREAL DISEASE.

ALLAN J. McLAUGHLIN, M. D.,

*Assistant Surgeon-General, United States Public Health Service.*

**I** UNDERSTAND that I am to say something as to the program of the Public Health Service against venereal disease. Major Sawyer has already outlined the program of the Army against venereal disease, which is not only the program of the Army but the program of the United States Public Health Service as well. I don't know whether Major Sawyer has made that clear. We are operating

on a joint plan—there is only one plan. There is an absolute unanimity as to that plan and its fundamentals, upon which each state may build and extend for the control of venereal disease within its bounds. There is no question but that the plan can be put into effect. I have little to add to the general features of the plan which have already been outlined.

The Public Health Service now carries

the bulk of the burden of that plan because it is the agency that deals directly with the individual states and furnishes the connecting link between the state organizations and the Federal Government. The primary essential in venereal disease control is to have in each state either a bureau of venereal diseases, or, if not that, at least to have this problem handled in the division of communicable diseases by one man who would devote his entire time to it. This problem is certainly big enough to demand the whole time of one man, and in this effort the service has been most active. We already have eighteen states in which we have agreed to finance part of the salary of such a man, making him an acting assistant surgeon in the Public Health Service, with the idea that the uniform will assist him in carrying out the Federal Program.

We are going still further in some of the states, such as South Carolina, which has more camps than any other state, I believe. I have not made this proposition yet to Dr. Hayne, but I can make it now, that instead of a part-time man we owe it to South Carolina to detail a regular full-time man to take charge of the venereal disease work under Dr. Hayne. There are certain other states which want such action on our part at a time when officers are scarce. However, we are ready to go the limit on this, but our limit, of course, is the limit of our funds. I feel that we will be able to save out of the \$500,000 appropriated for malaria and other diseases, including venereal diseases, at least \$150,000 for the venereal disease campaign independent of the \$1,000,000 which the service will undoubtedly get July 1, 1918, to carry on the work in the extra-cantonment zones. This will enable us to carry out the promises we have already made to the state health officers in regard to the distribution of salvarsan.

I believe there is only one way to approach this problem, and that is to treat

it the way the Italian government treated malaria, or as any sound health officer treats communicable disease,—by getting at the carrier—the elimination of the carrier. It is necessary to make the agency for the elimination of the carrier free. Why that has not been done before, I don't know. The Public Health Service would be warranted right now in going ahead with the manufacture of salvarsan and in distributing it through the state health officers in sufficient quantities for each state. However, as things are if we need 100,000 doses we will have to pay \$100,000 for it. Gentlemen, I can take that money and make 250,000 doses with it for distribution. I didn't see why, as commissioner of health of Massachusetts, I should regard German patents and deprive Massachusetts people of what they needed, and I don't see why the Federal Government should do this.

There is just one thing that makes me hold back at this time and that is the rumor that the Rockefeller Institute has a substitute for salvarsan which is nearly fool-proof and which is cheap, and which will do as good work as salvarsan. They have not made such a statement officially, but I understand they are getting to that point. It is a question of whether that rumor is true. If so, it would be foolish for us to go ahead with the manufacture of salvarsan. If not, the quicker we get to the salvarsan proposition, the better. I think it is up to us to find out just what their discovery amounts to. They are very sanguine. Possibly they have something which can be made for ten or fifteen cents a dose which is not as toxic as salvarsan and which is nearly fool-proof, as I said. That is the first thing for us to ascertain.

If this experiment is in such a state that its results will not be available for at least a year, I believe that we would be warranted before that time in going ahead with the distribution and manufacture of salvarsan.

The Public Health Service has laid stress in this program upon certain things. We have laid stress upon the establishment of facilities for the detection and treatment of venereal diseases with the idea in mind that there were thousands of people who would need no compulsion if the facilities for treatment were available. That is true. I believe it pays to advertise and that the clinic that does gets hundreds of persons voluntarily. The clinic which does not advertise and only waits for what is turned over to it through the operation of the law, has a small clientele and does not grow. There is a large field for improvement and extension in this respect, and in stimulating law enforcement.

That does not mean that I should include the law enforcement phase of the question as one of the duties of the health officer. I want to make that clear. The first thing to do is to start the clinic.

Then we come to another point. As a health officer I want to make the point very strongly that we should regard this problem as distinctly a problem of a contagious disease, leaving the moral, religious and social sides of the question to other agencies. I have dwelt upon this point to such an extent that I was at first misunderstood when before the Committee on Civilian Coöperation in Combating Venereal Disease. I had a lively session with them before I made them see my point of view. I do not mean that the moral and educational sides of this question should be disregarded, but I do believe that the health officer should have the health side of this matter clearly before him; he should and must have an interest in these other sides of the problem but he

should not lumber up the machinery of his health department with such agencies. He should act as a stimulant; he should utilize these other agencies to the full, but he should not under any conditions take over under the health department institutions reformatory or corrective.

I believe that possibly the biggest obstacle to the way of complete success is the lack of a proper place where women can be detained and treated and taken care of properly with a view to social reclamation, if that is possible. These women come under three heads:

First, there are the feeble-minded which should be in institutions, just as much as other mental delinquents. We don't want to run feeble-minded institutions, but we do want to see that such institutions exist and are utilized.

Second, there are the prostitutes who are not feeble-minded, and who possibly can be reclaimed, but who will not be reclaimed except for short periods, unless they are placed in an institution where they will receive the care, attention and instruction which will fit them to take their place in life again, and where the social agencies can operate to save them.

In the third class come the incorrigibles who need corrective treatment in jail.

As health officers you are interested in these other agencies, but in no case should you take them over. That is the trouble with the two sets of people working on this problem. Those working on the moral and educational sides say the health officer has no use for them. That is not true, but as health officers our best chance of getting results is to attack the venereal diseases as a contagious disease problem.

## DESCRIPTION OF THE PRACTICAL ORGANIZATION AND CARRYING OUT OF AN EFFICIENT STATE DEPARTMENT OF HEALTH PROGRAM AGAINST VENEREAL DISEASES.

H. G. IRVINE, M. D.,  
*Minnesota State Board of Health.*

**B**EFORE starting on this paper I should like to thank Dr. Bracken, Secretary of our State Board of Health, and the members of this Conference for this opportunity to come before you, because while I am technically at this time entitled to membership in the Conference, I am somewhat of an outsider.

This paper is not by any means presented to you as a program which is original with me or any group of men, but a program based on my own experience with the work in California and Minnesota, and the experiences of others as it has been given to me. It is, I believe, a practical program.

### ORGANIZATION AND BUDGET.

State control of venereal diseases should be inaugurated by the creation of a division or a bureau of venereal diseases as a department of the State Board of Health. For such an organization an annual budget of from \$30,000 to \$40,000 should be provided. Of this fund at least \$5,000 should be used for furnishing free arsphenamine (salvarsan).

### PERSONNEL.

In planning the personnel of such a department, three distinct fields must be recognized: medical, educational, and social service. There should, therefore, be a director who will head the division, and coördinate its work as a whole, and assume the responsibility for the medical work; an educational worker, who will have charge of all educational work; and a social service worker. It would seem

distinctly advantageous to have a director, at least temporarily, who is trained in venereal diseases, as many problems will arise in the administration of the work, the successful solution of which will depend upon this knowledge. It is also essential that in order to competently coördinate the work under him, he should have some knowledge of social hygiene, social service, and public health. He will find it necessary also to familiarize himself with the problem of prostitution, the problem of the feeble-minded, with law enforcement, court procedure, probation work, and reformatory systems. In the present war emergency, in order to properly coöperate with the Army and Navy he must be conversant with the details of their program, and their methods of handling the problem. Under the director, there should be preferably two physicians to act as field epidemiologists. It will be well to have one man and one woman. Both should have a knowledge of venereal diseases, and be trained particularly in the diagnosis of syphilis and gonorrhoea. This point should be emphasized, as the occasion will undoubtedly arise when these physicians will have to undertake examinations, or at least, to direct such examinations. It will be advantageous to have one of the physicians in the departmental headquarters, that he may act as an assistant to the director.

### EDUCATIONAL SUPERVISOR.

The person in charge of the educational work should be thoroughly familiar with all phases of social hygiene, and the modern

conception of its teaching. I believe this should be undertaken preferably by a woman physician, and if she can bring to the department an intimate knowledge of, and an experience with girls and their problems, it will be of decided value. Obviously she must be able to teach and to do public speaking.

#### SOCIAL SERVICE WORKER.

This position should be filled by a woman who has a knowledge, or an experience in social service work as related to venereal diseases. In addition to this it is important that she have at least some knowledge of court and probation work, and the handling of delinquents. The success of her work will depend considerably on her ability to educate the community to its needs. Inasmuch as this field is decidedly less established in most communities, than the others, she will need at least two assistants, and they should be selected with the two different angles of the work in view. One should be trained as a clinic worker, and the approach to the problem from this side. The other should be versed in protective work, and an experience as a police woman would be valuable.

#### OUTLINE OF PROGRAM.

Under ordinary conditions, a program should be developed gradually, and an effort made to carry the public and physicians along with you a step at a time. In this way several years might well be used in putting an entire program into force. If this were being done I should place diagnostic and treatment facilities first, along with educational propaganda, for the complete program, and legal matters last. But these are war times, and we must get the quickest action possible. Consequently, we must adopt and attempt to put into practice the entire program at one time. In order to do this we must first of all have law. In practically all of

the states this can be arranged by rules and regulations of the State Board of Health. Either there is a specific statute permitting the board to list infectious and contagious diseases, and adopt necessary rules and regulations for their control, or the board will have the power of quarantine over these diseases, and they can then declare all venereal disease cases under quarantine as fast as diagnosed, and adopt rules and regulations as to how the quarantine should be carried out in different cases. Many states have been forced to use this latter method. For the most part, the Western Australia law has served as a model, and many states have copied it almost verbatim. Venereal diseases must be reported, and I believe that there is only one way which is satisfactory and worth while, and that is by name and address. Reports of course, to be confidential and preferably direct to the State Board of Health. It would be extremely disagreeable in many cases in small communities for physicians to report to local health officers and besides many times a patient is being treated, and would be reported in a different community than his residence. Consequently, the local health officer where the case was reported, would have no jurisdiction. If the reporting of name is not required in all cases the physician should only be allowed to report by serial number, providing, he assumes the responsibility for that particular case insofar as spreading the infection may be concerned. In any case, if the patient does not remain under treatment, or so conducts himself as to endanger others, his name and address should immediately be required. Provision should be made for the patient having the privilege of changing physicians without being regarded as having stopped treatment. Guardians or parents should be made responsible for treatment of minors.

If possible, treatment should be per-

mitted only by qualified practitioners. This would tend to eliminate osteopaths, chiropractics, christian scientists, and possibly some quacks and druggists.

The sale of nostrums and other remedies for gonorrhoea and syphilis by druggists must be stopped. Merely requiring them to report their sales will not suffice, unless that would automatically place them in a position of prescribing, and so make them liable under the medical practice act. But I do not see how this could be done if the patient selects the remedy. Such a law is very much to be desired, as at least 50 per cent of dispensary cases of gonorrhoea go to druggists first, and lose considerable time, and a valuable opportunity for successful treatment.

The board of health should have adequate power to examine suspected persons. This should include prostitutes, and all those arrested for moral turpitude, and all prisoners and other institutional inmates. It should also have full power of quarantine to be used whenever deemed necessary. Exposing another person to gonorrhoea or syphilis should be made a misdemeanor. Freedom from venereal disease should be one of the conditions placed upon securing a marriage license.

Flexner has stated that a rainy night had more effect upon reducing venereal disease than any efforts at medical regulation of prostitution. This statement hinges upon the making of prostitutes inaccessible. Believing his observation to be proven true, I think that the next important step in our program should be the securing of rigid law enforcement as regards prostitution. I believe that the putting into effect of law enforcement in a community which has been lax, will very rapidly reduce exposures and infections by at least one-half. This statement is practically proven by army statistics which we collected in San Francisco at the time such a program was put into effect. Most

communities will have sufficient laws or ordinances to cover this work, but we need to educate the police departments and courts to the needs of this action from the public health standpoint. An energetic and continuous drive should be made by the police departments against all phases of prostitution, including any segregated district, open houses, rooming houses, cheap hotels, and street walking. Such persons when arrested should preferably be held under quarantine as having had contact with a communicable disease, instead of being permitted to secure bail under a charge of vagrancy or disorderly conduct. This not only insures the opportunity for a proper physical examination, but also does away with any question of bail-bond sharks. Agreement should be had with police or municipal judges to continue all such cases until a physical examination is made. If a person is found diseased by the health authorities, necessary isolation or quarantine and treatment should be instituted. If they are not found diseased, arrangements should be made with the courts for drastic jail sentences; fines and suspended sentences should not be tolerated, unless recommended, after proper investigation by the probation officer. This is absolutely necessary in order to get proper repressive effect to reduce prostitution to the minimum required by the War Department.

In caring for this class of patients we must recognize the fact that they are not necessarily hospital patients, but that what is needed is a proper place of detention where expert medical care can be given. We must recognize the fact that many of these cases will finally be detained over a period of several weeks or months, and this is decidedly an impractical thing so far as straight hospital wards are concerned. Therefore, the need for a place of detention, which is neither a hospital nor a jail, becomes at once apparent, and very



few communities in this country at the present time are furnishing such a place. Inasmuch as inmates of our city and county jails are essentially a class of people likely to be infected, and the surveys already made indicate not less than 50 per cent are infected, the opportunity should be seized to make examinations and institute treatment of all persons confined in these jails, extending if necessary by quarantine, the time beyond the expiration of their sentence. City and county jails are mentioned particularly as they are more frequently without a medical staff, whereas state prisons are usually more adequately equipped.

In this part of the program the social service work is of very great importance. It would be within the province of the social service department to see that all prostitutes are carefully examined mentally, in order that the feeble-minded may be registered and properly provided for. Careful sociological investigations should be made, and this record furnished the court to assist it in determining the sentences. Proper follow-up of cases should be instituted after the period of quarantine has expired. In connection with this work a very great responsibility rests upon the social service department, the educating of the community to the needs of proper detention homes for both juvenile and adult delinquents, and to the need of adequate quarters for the feeble-minded. In dealing with a large group of hardened offenders, the need also of a state reformatory for women, and a law which will permit of rather long time, indeterminate sentences to such reformatories, will be made apparent. It will not be possible in a few weeks or months to get such persons physically well, out of vicious habits, and trained in some vocation by which a legitimate living can be made, but it will be possible with an indeterminate sentence in a proper reformatory, in the course of two or three

years, to get a large percentage at least of such people into condition where they could at least be placed at work under careful supervision or probation.

In connection with this work, as well as with the step which is to follow, there must be furnished free laboratory service, including Wassermann tests, gonorrhoeal fixation tests, and microscopic examinations of smears. It would be to advantage to have the state board exercise a certain amount of control over all laboratories throughout the state, and require that all positive findings be reported to the board, in order that these reports might be checked up with the reports of cases.

The question of free salvarsan has already been mentioned in connection with the budget. There may arise some question as to the method of its distribution. Inasmuch as we still, unfortunately, have many physicians who are not skilled in giving or using this remedy, I believe the time is not yet ripe for the general distribution of free salvarsan to physicians. I would, therefore, suggest that it be distributed to hospitals and dispensaries which have been placed on the approved list by the board of health, and to local health officers. We must not, however, forget that the important thing is to get patients treated, and to make as much use as possible of this free salvarsan, so that this rule should be followed with reason, and no hesitation should be shown in making exceptions, in order that deserving persons should secure salvarsan.

A large percentage of people are not in a position to pay for expert services. Investigations have demonstrated that unless expert service is rendered patients are not treated to a cure. On the other hand, free hospital and dispensary treatment for venereal diseases is entirely inadequate in most communities of the country. An effort should therefore be made to secure greater facilities along this line. We should

not, however, be satisfied simply with securing larger facilities, but we must insist as well that they be efficient. It is, therefore, necessary that some system of approval or licensing should be instituted by the board of health following adoption of certain standards. Such standards should include for the dispensary sufficient room, equipment, and an adequately trained staff. There should be nurses and a social service department to do the necessary follow-up work. The staff should be required to devote sufficient time to inform all new patients of the seriousness and the need of long continued treatment for their disease. A requirement should be made calling for the distribution of approved literature. There is also a large group of people who can afford to pay something for their treatment, but who cannot pay the fees of specialists, and who are employed during the day, making it impossible for them to attend the average clinic. This brings up the decided need in every community for an evening clinic, and this may very well be a pay clinic. A nominal charge of 50 cents or a \$1.00 has been demonstrated to be sufficient to make the clinic practically self-supporting. A so-called "advisory clinic" is also a very desirable factor, and there is no reason why this should not be run in connection with the local health department. These dispensaries can also be used as prophylactic stations if advisable. Perhaps the most difficult patient of all to control is the one going to a physician and paying for his or her treatment. Physicians in the past have assumed no responsibility in seeing to it that these patients remain under treatment. Very few have taken the time or trouble to inform the patients of their condition, or of the imperative need of long continued treatment. In fact, many times the reverse has been true, and quick and easy cures have been promised for stated sums of money. In my own experience, men

who are otherwise recognized as reputable physicians do not hesitate to adopt such tactics in connection with venereal diseases. A campaign of education must be carried to the medical profession as well as to the laity in order to instill into the profession the public health viewpoint in controlling these diseases. Without doubt, the enforcing of rules and regulations will not only assist materially in securing the necessary coöperation of the medical profession, but it will also have a very great educational value.

I have purposely left the educational field to the last, not because it is the least important, for I believe that it is fundamentally the most important, but because it will be much more time consuming and slower of effect upon reducing venereal diseases than the rest of the work. It should be the prime duty of this department to spread a knowledge of venereal diseases and of the state's program for their control. This should be done by proper newspaper publicity, lectures, pamphlets, exhibits, etc. Lectures should be given to groups of employers and employees, to various men's and women's organizations, and to medical societies. A full line of pamphlets should be issued on sex hygiene. A pamphlet on treatment should be furnished to physicians as well as one containing information and instructions to be given to patients. Placards for use in public comfort stations and other suitable places should be arranged for. Reference should be made on these to local dispensaries and advisory clinics. A carefully planned exhibit and a stereomotor-graph equipped with proper slides will also be very valuable. A definite educational campaign should be waged against quacks and fakers.

The next step in the educational work is directed toward those who in their turn will be teachers, and is not limited in its scope entirely to venereal diseases.

Courses should be arranged for in every state university, and in all normal schools. These courses should cover the biology and psychology of sex, sociology, sex hygiene, and venereal diseases. Courses should be given in medical schools with particular reference to the public health side of the problem. Courses should be given to hospital, public health, and school nurses. Under the educational department a course of study on sex education should be planned for parents' and teachers' associations. Communities should be stimulated to the further use of present recreational facilities the need and the part this work plays in stimulating a normal sex life in the young should be emphasized. This is one of the very great needs in rural communities.

I believe that one important detail of the educational work should be giving people to understand that something can be done if exposure has already taken place. This may be called early treatment or prophylaxis, as you will. Its value has been fully demonstrated by the army, of that there can be no question, but there is the question as to how this information should be given. I personally believe that no wide-spread publicity of it should be given, nor should there be any question of going to the extreme of suggesting the sale of a prophylactic package. It should be a proper function for the dispensary or hospital in dealing with individual patients to give out this information.

#### CONCLUSIONS.

Inasmuch as the call for this work has come directly from the Federal Government, it seems only fair that the Federal Government should provide funds to subsidize the state work on at least a 50-50 basis. This would assist more than anything else in offsetting what I have found to be the biggest stumbling block in the entire program, namely, the securing of proper funds for carrying on the work. If every state which appropriates \$30,000 or

\$40,000 could receive another thirty or forty thousand dollars from the Federal Government, sufficient money would be available so that the state could in turn subsidize the local communities, or could itself place a number of dispensaries at advantageous points throughout the state. It would be easier then to secure necessary detention hospitals, additional physicians, nurses, social service workers, equipment, etc., which is necessary for the carrying out of the program.

Emphasis should be placed on the educational work, particularly in the medical schools, as the people at large depend upon the physicians for information concerning these diseases, and unfortunately the majority of the medical profession have little idea of the modern conception of sex hygiene, or the public health viewpoint of the problem of prostitution, or venereal diseases. This is due primarily to lack of teaching of these subjects in the medical colleges.

A well-rounded program for combating venereal diseases must take cognizance of every factor which enters into their spread. Just why almost every physician who takes up the discussion of the problem should preface his remarks with the statement that we should be concerned with it only as a medical problem and not with morals, is not quite plain to me. Surely all of us must recognize that at the bottom it is much more of a moral question than anything else. If we could at once do away with sex immorality the days of venereal diseases would be numbered. We know that an attack only from the medical side must fail, just as it has always failed in attempted regulation of prostitution. We cannot do away with venereal diseases until we prevent exposures, we must preach continence using the disease as an argument if you will. Let us do everything that medical science says is good, but let us not hesitate as physicians, and as a profession, to declare ourselves on the moral issues as well.

## THE KAHN-CHAMBERLAIN BILL.

THE PRESIDENT: I will now call upon Dr. Rankin and Dr. Drake to appear before Conference and explain the provisions of the Kahn-Chamberlain bill before that bill comes up for discussion, so that the members who have not already seen the bill or are not familiar with its contents, may have a thorough knowledge of it.

DR. DRAKE, *California*: This bill is known as the Kahn-Chamberlain and has for its object the protection of the military and naval forces of the United States against venereal diseases. With your permission I will read the bill:

65TH CONGRESS,  
2D SESSION.

H. R. 12258.

IN THE HOUSE OF REPRESENTATIVES.

MAY 25, 1918.

Mr. Kahn introduced the following bill; which was referred to the Committee on Military Affairs and ordered to be printed.

## A BILL

*To Protect the Military and Naval Forces of the United States Against Venereal Diseases, and for Other Purposes.*

Sec. 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby created a board to be known as the Interdepartmental Social Hygiene Board, to consist of the Secretary of War, the Secretary of the Navy, and the Secretary of the Treasury as ex-officio members, and of the Surgeon General of the Army, the Surgeon General of the Navy, and the Surgeon General of the Public Health Service, or of persons whom the Secretaries of the Army, Navy, and Treasury may respectively designate. The duties of the board shall be (1) to recommend rules and regulations for the expenditure of moneys allotted to the states under section five; (2) to select the institutions and fix the allotments to each institution under section five; and (3) to recommend to the Secretary of the Treasury, the Secretary of War, and the Secretary of the Navy such general measures as will promote correlation and efficiency in carrying out the purposes of this act by their respective departments. The boards shall meet at least quarterly, and shall elect annually one of its members as chairman, and shall adopt rules and regulations for the conduct of its business.

Sec. 2. That the Secretary of War and the Secretary of the Navy are hereby authorized and directed to adopt measures for the purpose of assisting the various states in caring for civilian persons whose detention, isolation, quaran-

tine, or commitment to institutions may be found necessary for the protection of the military and naval forces of the United States against venereal diseases.

Sec. 3. That there is hereby established in the Bureau of the Public Health Service a division of venereal diseases, to be under the charge of a commissioned medical officer of the United States Public Health Service, detailed by the Surgeon General of the Public Health Service, which officer, while thus serving, shall be an assistant surgeon general of the Public Health Service, subject to the provisions of law applicable to assistant surgeons general in charge of administrative divisions in the District of Columbia of the Bureau of the Public Health Service. There shall be in such division such assistants, clerks, investigators, and other employees as may be necessary for the performance of its duties and as may be provided for by Congress.

Sec. 4. That the duties of the division of venereal diseases shall be, in accordance with rules and regulations prescribed by the Secretary of the Treasury, (1) to study and investigate the cause, treatment, and prevention of venereal diseases; (2) to cooperate with state boards or departments of health for the prevention and control of such diseases within the states; and (3) to control and prevent the spread in these diseases in interstate traffic: *Provided*, That nothing in this section shall be construed as limiting the functions and activities of other departments or bureaus in the prevention, control and treatment of venereal diseases, and in the expenditure of moneys therefor.

Sec. 5. That there is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, the sum of \$1,000,000, to be expended under the joint direction of the Secretary of War and the Secretary of the Navy to carry out the provisions of section one of this Act: *Provided*, That the appropriation herein made shall not be deemed exclusive, but shall be in addition to other appropriations made by the respective states and funds received from any other sources of a more general character which are applicable to the same or similar purposes.

That there is hereby appropriated, out of any moneys in the Treasury, not otherwise appropriated, the sum of \$1,400,000 annually, for two fiscal years, beginning with the fiscal year ending June thirtieth, nineteen hundred and nineteen, to be apportioned as follows: The sum of \$1,000,000, which shall be paid to the states for the use of their respective boards or departments of health in the prevention, control, and treatment of venereal diseases; this sum to be allotted to each state in accordance with the rules and regulations prescribed by the Secretary of the Treasury, in the proportion which its population bears to the population of the continental United States, exclusive of Alaska and the

Canal Zone, according to the last preceding United States census, and such allotment to be so conditioned that for each dollar paid to any state the state shall specifically appropriate or otherwise set aside an equal amount for the purpose stated in this section, except for the fiscal year ending June thirtieth, nineteen hundred and nineteen, for which the allotment of money is not conditioned upon the appropriation or setting aside of money by the state. *Provided*, That any state may obtain any part of its allotment for any fiscal year subsequent to June thirtieth, nineteen hundred and nineteen, by specifically appropriating or otherwise setting aside an amount equal to such part of its allotment for the purposes stated in this section; the sum of \$100,000, which shall be paid to such universities, colleges, or other suitable institutions as in the judgment of the Interdepartmental Social Hygiene Board are qualified for scientific research for the purpose of discovering, in accordance with rules and regulations prescribed by the Interdepartmental Social Hygiene Board, more effective medical measures in the prevention and treatment of venereal diseases; the sum of \$300,000, which shall be paid to such universities, colleges, or other suitable institutions as in the judgment of the Interdepartmental Social Hygiene Board are qualified for scientific research for the purpose of discovering and developing more effective educational measures in the prevention of venereal diseases and for the purpose of sociological and psychological research related thereto.

That there is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, the sum of \$200,000 for the fiscal year ending June thirtieth, nineteen hundred and nineteen, for the purpose of defraying the expense of the establishment and maintenance of the division of venereal diseases in the Bureau of the Public Health Service.

Sec. 6. That the terms "state" and "states" as used in this Act include the District of Columbia.

DR. DRAKE, *Illinois*: Gentlemen, this bill as I understand it, has been introduced in the House and Senate and I believe it will appeal to all of you as being the solution of your chief difficulty in organizing an effective venereal disease service within your own state. Personally, I feel the bill should receive the support of all the state health officers, and in this connection I should like to present the following resolution:

WHEREAS the control of venereal diseases is a problem of national scope, great magnitude and urgent military necessity; and

WHEREAS the effective control of venereal diseases throws upon the several states a great financial burden for which they are generally unprepared; and

WHEREAS a bill has been introduced into both houses of Congress known as the Kahn-Chamberlain bill providing financial aid on a fifty-fifty basis to the various states, as an emergency war measure, bringing the scientific resources of the government more effectively to bear on this problem, therefore be it

*Resolved*: That the Conference of state and provincial health authorities endorse the principles of the aforesaid bill and urge its passage, and be it

*Resolved* that copies of this resolution be transmitted to the chairman of the Military Committees of the Senate and House of Representatives.

There is another resolution which I should like to introduce dealing with the dissemination of information relative to venereal diseases:

WHEREAS venereal diseases, according to the statement of the Surgeon General of the army, constitute the greatest cause of disability in the army, and

WHEREAS, these diseases result in decreased efficiency in the nation's industrial life, and

WHEREAS the experience of the first year of the war has clearly shown that venereal diseases in the army and navy are due almost entirely to conditions in civil life, and

WHEREAS venereal diseases in civil life are due largely to ignorance and misinformation and the widespread belief among men that gonorrhea is no worse than a bad cold and that sexual activity is necessary to health, and

WHEREAS much misinformation has been disseminated by means of advertisements of venereal disease nostrums posted in public lavatories, and

WHEREAS venereal disease placards have been found effective in educational propaganda in various states, be it

*Resolved*, That the Director General of the Railroads of the United States and the Surgeon General of the Public Health Service be urged to cooperate in posting in men's lavatories in all the day coaches and pullman cars operating in the United States and in men's lavatories in all of the railroad stations of the United States, a venereal disease placard which shall include an enumeration of the effects of gonorrhea and syphilis; a warning against quack doctors and venereal disease nostrums; a statement to the effect that continence is compatible with health; and an offer to supply pamphlets of information upon request; and where practicable a notice stating where treatment may be secured in local dispensaries, be it further

*Resolved*, That a committee of three be appointed to present these resolutions to the Director General of the Railroads of the United States and to the Surgeon General of the Public Health Service and to urge upon them the importance of bringing about the posting of these placards immediately as a war measure.

DR. IRVINE, *Minnesota*: In connection with the first resolution read, I should like to state that I believe we should go on record not only as in favor of the Kahn-Chamberlain bill, but also on record as against the other bill, known as the Miller bill which has been introduced. I call attention to this fact for this reason: Not only have the governors and state health officers been circularized in favor of the Miller bill, but the mayors and local health officials. I think it would be distinctly within the province of this Conference if we go on record against this other bill. I understand that the surgeon generals are against it and we all think it a very bad piece of legislation and decidedly not what we want.

DR. HAYNE, *South Carolina*: In the interests of fairness I don't think we should condemn a bill that has not been read in favor of one that has been read. I don't know what this bill is and I should hesitate to condemn it.

THE PRESIDENT: The subject of venereal diseases is now open for general discussion and I would like to ask each speaker to be brief as possible because we have a number of matters still on the program. The majority of our members are fairly well informed on this subject and have pretty definite opinions, so long discussions should not be necessary.

#### DISCUSSION.

DR. BRACKEN, *Minnesota*: May I bring up the question of the Miller bill? Most of you must be familiar with what is known as the Miller bill, introduced prior to the Kahn-Chamberlain bill, I believe, and which has been circularized very widely over the country, as Dr. Irvine has said. I think it should be distinctly understood that we should not endorse the Miller bill and that in fact, we should use our influence against it, and if you are willing to go further than that I would be willing to make a motion that this Conference is not in favor of the Miller bill.

DR. McLAUGHLIN, *U. S. P. H. S.*: Dr. Bracken is my friend in many things, but that does not deter me from differing from him in this respect by saying that the Miller bill is not a bad bill. I do not think it would be wise to go on record against it, because it is well-intentioned. I think the simple endorsement by this Conference of the Kahn-Chamberlain bill will be

sufficient, and would be a little more diplomatic. Furthermore, there was not time to carefully consider the Miller bill, and under the circumstances, Dr. Bracken, I believe that it would be wise not to go so far as to condemn the bill.

DR. BRACKEN, *Minnesota*: I am not a good diplomat, and I withdraw my motion in favor of the diplomat.

DR. IRVINE, *Minnesota*: I would like to explain my attitude. I felt that we should discuss the question as to whether we should go against the Miller bill, and I think the question should be discussed.

THE PRESIDENT: The resolutions presented by Dr. Drake are accepted and referred to the Committee on Resolutions for consideration and report.

THE PRESIDENT: Before taking up the next item on the program Mr. McPherson would like to say a few words to us.

MR. McPHERSON: At an earlier hour you were kind enough to make a change in regard to yesterday's vote of the Conference regarding the name of the Association by again re-introducing adequate wording to embrace the Dominion of Canada and its health officials. That was a very courteous act, most courteously performed, and one which I assure you was most highly appreciated. Since then you have been kind enough through your President to introduce our national emblem and give it a position of honor beside your own for which we thank you most heartily.

It had occurred to me before your latest manifestation of neighborly esteem to express our gratitude at yesterday's proceedings by saying to you that, if you were not absolutely wedded to the city of Washington as your place of annual meeting, that there is at least one other place in the Dominion of Canada which would most gladly appreciate the honor of an official visit. Not a very great distance from here and practically in a very central point on the continent of North America there is what we locally are proud to call "the Queen City of the West," the city of Toronto, capital of the province of Ontario, the seat of the Provincial University, colleges and other institutions of learning, and I having the honor of being a visitor here today and in a representative capacity from the government of the province of Ontario, having in my department the supervision among other

things, the health administration of the province, I have great pleasure, on behalf of the province of Ontario, in extending to you a most cordial invitation to come to Toronto as your next place of meeting.

THE PRESIDENT: On behalf of the Conference I have the honor to thank Mr. McPherson for his most kind invitation and to say that it will be very carefully considered.

### REPORT OF COMMITTEE ON EXTENSION OF FEDERAL ASSISTANCE IN RURAL SANITATION TO THE SEVERAL STATES.

PRESENTED BY DR. W. S. RANKIN,  
*Secretary, State Board of Health of North Carolina, Chairman.*

Your Committee, after correspondence with each other and with friends in Congress, decided that on account of the necessarily extensive war legislation that it would not be best to ask for legislation either last winter or possibly next fall. Your Committee wish to report that their interest in this important matter is keenly alive, and they will take advantage of the first opportunity to interest Congress in the proposed legislation.

It was planned to have Senator Lever, chairman of Committee on Agriculture, address the Conference at this meeting, but owing to the number of matters still before us for consideration, it was deemed best not to invite him to appear at this time.

It was voted that the report of the Committee be accepted and the Committee continued.

### REPORT OF COMMITTEE ON ACTIVITIES IN PUBLIC HEALTH MATTERS BY FEDERAL DEPARTMENTS OTHER THAN THE UNITED STATES PUBLIC HEALTH SERVICE.

It was announced by Dr. Sippy of Kansas that Dr. S. J. Crumrine, the Chairman of the Committee, had instructed him to

say that owing to the exigencies of the war situation and the congestion of work in the various federal departments the Committee thought it an unsatisfactory time to make a report and asked that the Committee be continued until next year.

It was voted that the report of the Committee be accepted and the Committee continued.

At half-past twelve it was voted that the meeting be adjourned until half-past two that afternoon.

### SESSION ON THURSDAY AFTER-NOON.

The Conference was called to order by the President at half-past two o'clock.

### REPORT OF COMMITTEE ON SANITARY POLICY UNDER WAR CONDITIONS.

PRESENTED BY DR. JAMES A. HAYNE,  
*Secretary of the Board of Health of South Carolina, Chairman.*

I want a full discussion of this most important matter. If there is anything in the world that is important to this Conference it is going to be the policy of this Conference in regard to a program during the war. That is the most important thing because any action we take must necessarily come under a policy. Now don't you think it wise to prepare to have a policy stated first and then outline a program under that policy?

Your Committee met last night and went over very carefully every part of this report I am now going to make for four hours. Every possible objection which could be raised was raised, and finally at twelve o'clock last night, it was decided that these resolutions should be reported to you without prejudice. In other words, the members of this Committee felt that there were so many things involved in these resolutions that they would prefer

to have them presented to the Conference as a whole without an unfavorable report, without a favorable report, simply as an unprejudiced report. There is no doubt in the minds of the members of the Committee that there is a necessity for some such resolutions. The only doubt that was in the minds of any present was how they could be made applicable to all the states.

Now the Committee, as you know, was composed of a doctor and state health officer from New York, a doctor and state health officer from the Commonwealth of Pennsylvania, a doctor and state health officer from Illinois, and a doctor and state health officer from a little state 'way down south, South Carolina—that is your Committee. The gentleman from the great Empire state said that his forces are not being disintegrated because the great Empire state of New York is able to pay such salaries that even the United States government cannot compete. Another great factor is that the state of New York is 40 per cent foreign-born; the little state of South Carolina has only one quarter of 1 per cent foreign-born. It is possible that the plea of patriotism may apply to South Carolina a little more than to the great state of New York.

Under these circumstances the gentlemen of the large states whose forces were not being disintegrated were willing that the smaller states, whose forces were being disintegrated, should make a report that they hoped would save them from disintegration. These resolutions only bind the states or the departments that accept them. They bind no others, and those states whom the preamble does not affect, who are not being disintegrated, are not in the slightest degree interested in these resolutions except to help those weaker states who are being disintegrated. The resolutions which I read yesterday, and which I shall now read again form the

policy that I wish to report, and will give to the executive officials of state boards of health and their forces the same status in the United States that is given to American colleges. In other words, the dean of an American college is consulted and has to give a written release before any member of his staff will be appointed and taken away from him. Surely health officers are at least as necessary in this time of war as medical colleges. Both are necessary.

What do these resolutions mean? It means that I must lay aside the idea that I have in my mind that I am necessary to South Carolina, and submit it to some person who is responsible for military efficiency to say whether I am necessary or not in that particular place. I have no right to say so.

We don't think that we should go to the President of the United States and tell him what to do, but we certainly have the right to go to him with resolutions and ask him to say whether these resolutions are necessary and whether our preamble is true. This is distinctly a war measure not to be carried out except under war conditions and terminating with the war. It is not a condition which will last forever, we hope it may not last more than two or three years more at the outside.

We cannot expect the United States army to pay the health officers while they are acting as such—we simply want to make it possible for the Surgeon General of the army to call our men into service if he needs them, to give him the right to do that, and any man, knowing the President can call him into service, retains his self-respect. If the President does not call him he feels that the President does not call him because he believes and designates that man as doing his duty in that state of life in which it has pleased God to call him.

If there is any agency that has the right



to say that state health departments should stay where they are. I have been unable to find it. It has been unofficially stated that state health departments will not be touched, but the fact remains the same that they are taking every single man who will accept a commission. Why? Because we have the best men you can find, the very men the government wants to get.

It is all very well to apply for a commission knowing full well that unless you comply with certain technicalities, the government cannot call you. I can apply for a commission, I can do as 3,000 others have done in the United States. I can frame that commission, but the government cannot call me unless I have gone before a notary public, have taken the oath of allegiance to the government and have formally accepted the commission and filed that acceptance in Washington. Unless I do that, I cannot be called, and the man who does not do that, but just frames his commission and hangs it on the wall is camouflaging. I am commissioned. I know I can be called. If I was called tomorrow and didn't go, a squad of soldiers would come after me and I would be taken, not to France, but to Leavenworth.

We want to be able to say that we have done our duty, our full duty, to say that we were called and we were ready. Now, that is what we believe that these resolutions will effect. If any other gentleman has any other resolutions he would like to introduce that will take the place of these, which put the boards of health of the United States in a military status, I will most cheerfully accept any substitute.

I am not wedded to this resolution, but I do want to see a military status established and given to the states that need a military status. For the other states that do not need a military status because they do not care to go, or do not feel it is necessary to give up anything to go, why

let them not sign this resolution, but those that feel that every man feels down in his heart that he should give himself as a sacrifice upon the altar of his country, let him sign.

I will now read the resolutions.

RESOLUTIONS FOR COÖRDINATING STATE BOARDS AND DEPARTMENTS OF HEALTH WITH THE OFFICE OF THE SURGEON GENERAL OF THE UNITED STATES ARMY.

WHEREAS, in the application of the volunteer principle in military organization, all concerned and prompted by their self-respect and their duty to their country at this time must lay aside, amid the conflicts of military and civilian claims for service, their own judgment and preferences and defer to the judgment and wishes of those charged with the responsibility for military efficiency, and

WHEREAS, our country has adopted the volunteer principle for securing a large force of medical officers for our army, and

WHEREAS, in conformity with the aforesaid preambles, the medical profession of the country is so depleted that state health agencies are not only finding it impossible to secure additional medical officers, but are finding it impossible to hold even the small force that has not yet applied for commissions in the army, and

WHEREAS, this large demand on the medical profession for medical officers is resulting in a conflict of interests, a competition between the various state health agencies and our army for which the army is in no way responsible, and which is contrary to the larger interest of our country and which is causing great disorganization among state health agencies, and

WHEREAS, the medical service of the army and the state health agencies are in fact, and should be in practice, coördinate, working with the fullest understanding, and in closest harmony for the protection of the health of the military and civilian population, and

WHEREAS, the aforesaid competition and conflict of interests is due to the absence of some central coördinating authority responsible alike for maintaining the health of the army and the health of the civilian population, upon which the health of the army largely depends, and

WHEREAS, the office of the Surgeon General of the army affords a means and affords the only means for centralizing and coördinating these closely related, mutually dependent agencies; therefore be it

*Resolved*, That the Conference of State and Provincial Boards of Health of North America request and urge the President of the United States to designate the Surgeon General of the army to accept responsibility for maintaining the integrity and efficiency of any state health

agencies signatory to these resolutions during the period of the war, and be it further

*Resolved*, That in the event the President of the United States shall designate the Surgeon General to accept the aforesaid responsibility, the state health agencies signatory to these resolutions do hereby agree to bring their entire executive staffs under the control and the direction of the Surgeon General of the army by requiring every member of their executive staffs to apply for and accept, in case it is granted, a commission in the Medical Reserve Corps of the army, or some other subdivision of the army under the control of the Surgeon General.

DR. RANKIN, *North Carolina*: I would like to offer an amendment to the resolutions as read. There is a feeling on the part of a good many that the resolutions, by not mentioning the United States Public Health Service, reflect upon the Service. That was not the intention of the people who had anything to do with this resolution. The reason that the resolution is written covering only state health agencies is because the Public Health Service is not a military organization and could give the states no assistance. In order that the lack of mention of the Service in this resolution may not be misconstrued, I move that the resolution be amended as follows:

In the interests of fairness be it resolved that nothing in these resolutions is to be considered as a reflection upon the United States Public Health Service.

It was voted that the above amendment be adopted.

THE PRESIDENT: The original resolution as amended is now before you.

DR. HAYNE, *South Carolina*. I will ask that the roll be called by states on this resolution as amended.

#### DISCUSSION.

DR. WELCH, *Alabama*. It seems to me, gentlemen, that the business proposition that is before us today, stripped of oratory and other confusing accessories, is that we propose to volunteer the personnel of our health departments, not as state boards of health, but as individuals, and place them at the disposal of the Surgeon General of the army in the Medical Officers Reserve Corps on the condition that the Surgeon General of the army enter into a gentlemen's agreement with the state boards that he will not call us out, or if he does call any of us, he will put some one else in our place.

Now that is a business proposition. I am in favor of the principles involved. The state boards of health are essential factors in the conduct of this war, and their personnel should be protected and kept intact because there is no way to have men ready for the draft unless the state boards of health maintain their efficiency.

There is no line of cleavage between the army and the civilian population because the army is recruited from the civilian population and as soon as the war is over they return to the civilian population, so that our interests are absolutely inter-dependable. Unless the state boards of health are protected there is no way of giving good service to the army. The principle that is involved here is a good one, but whether or not we are going to be able to have the Surgeon General enter this gentlemen's agreement is another proposition. If he does not I would not like to volunteer my personnel, because I have a contract with them that they will stay with me twelve months. There is one young man who made such a contract with me. He has been placed in a deferred classification and does not have to volunteer his services. Under that deferred classification he made a contract to work with me until certain definite plans which have been projected by the State Board of Health of Alabama are accomplished. Under this gentlemen's agreement I should be perfectly delighted to relieve him and my other employees of all embarrassment which might be caused by the contract.

Furthermore, such an agreement would relieve us of criticism, because there is bound to be criticism as so many of us are also chairmen of our state committees of national defense and as such it is our business to get men into the Reserve Corps. We are frequently asked why we don't go in ourselves. I don't see any good reason why we shouldn't. I am in favor of this resolution and wish to endorse it. If there are any details to be worked out I would suggest that a committee be appointed for this purpose.

I hardly see how in its present form this resolution is to be brought to the attention of the Surgeon General or the President of the United States, which is its proper destination. I hope that some plan will be arranged so that this matter can be brought to the attention of the President so that he may with us devise some plan whereby state boards of health and the

United States Public Health Service can be protected from the draft. Working in Alabama today are men of draft age. One of them said to me the other day that he was not satisfied; that the man who does not get into this struggle or hasn't a good reason for not getting into it, is going to have no standing whatever when it is over. These young men want to get into the army. The one I mentioned in particular is doing ten times as much good in this particular work as he could do in the army as an individual, because he is the head of a great unit of public health administration in Alabama. But he doesn't feel satisfied. He is deciding this proposition for himself when he feels that some one higher up ought to be deciding it for him. He is doing war work, but that definition should be made by the people higher up.

DR. GWYN, *Florida*: As I understand it, this resolution, if adopted, will relieve a certain amount of pressure or embarrassment, so to speak, of state health officials. The Florida State Board of Health already has a service flag with six stars, and there are others who are contemplating entering government service. I believe that public health officers are doing real war work, but that decision should be made for them by some one in authority, and since this resolution will effect that result, I want to place the Florida State Board of Health on record as supporting this resolution.

DR. DALTON, *Vermont*: I wish to say as strongly as I can that Vermont is in favor of this resolution.

DR. TUTTLE, *Washington*: We held a meeting a year ago. We passed resolutions offering our services, through the Council of National Defense, to the United States Public Health Service. Whether the Council of National Defense has pushed the legislation introduced as a result of our resolution as hard as they could, I don't know, and don't care to raise the question, but in so far as I am concerned as representing the state of Washington I want to say that I stand behind the resolutions passed last year offering our services as a reserve corps to the United States Public Health Service, until Congress takes any action which might make that impossible.

DR. LEATHERS, *Mississippi*: It seems to me that this matter is one that certainly causes every state health officer a great deal of concern.

Every man who is able-bodied and who feels that he wants to serve his country in the best capacity, desires to be placed under such leadership as will permit him to achieve this aim. In my state just recently one of the most prominent physicians said to me, and as president of the State Medical Association and as state health officer I have a duplicate responsibility in this matter, "Leathers, Why is it you have not enlisted in the Medical Reserve Corps?" This man I speak of is a captain in the Medical Reserve Corps. I thought I was rendering as useful a service as any in my work in Mississippi, but so far as this man's opinion was concerned, it didn't seem to be of much account. I don't think he is alone in this opinion. He said, "If you don't enlist in the Medical Reserve Corps, after this war is over you won't be in it." That is the statement this man made to me. He may be incorrect. That is not a matter to be passed upon in this connection, but that is a frequent statement made in my state relative to persons eligible for the Medical Reserve Corps.

Now that brings me to this point. Health officers of a state have absolutely no status in connection with military affairs in this country. We must remember that people do not analyze the fine points in such a case as we analyze them on our own behalf. They are forming their own opinion in regard to each medical man in my state as to whether he should go or stay at home. It seems to me that the idea which is expressed in these resolutions does not hurt anybody. So far as I am concerned, and I say this truthfully and sincerely, I have no desire to do any public health institution any injury by my attitude in this matter. The Lord knows my attitude towards the United States Public Health Service is of the kindest. It seems to me the question of placing the health agencies of this country under one coördinating agency, one which can direct, coördinate and bring these agencies into one effective, efficient instrument for the advancement of the public health in this crisis in our history is vital.

That is not being done today. Why have so many agencies approaching me today as there are? Every one is writing to me about venereal disease. I don't mind their letters, I don't mind giving information on this subject, but there seems to be a lack of coöperation,—that is the point I wish to make. I have in my desk

a list of names sent to me by an army official of men they have selected to lecture in my state on venereal disease. There is not one of those men who can talk on venereal disease. How were they selected, and why? The Council of National Defense has sent me a similar list. I presume this same thing is going on in other states.

The purpose of this resolution is simply to provide a military status for the health officials. I am willing to serve wherever I may be called under this plan. What we are trying to do is to get a military status in our work and to get some directing force. Now I speak without prejudice as to what that directing force shall be.

DR. RANKIN, *North Carolina*: I want to say a few words in reply to Dr. Tuttle. We did meet here last year and approved and endorsed Senate Joint Resolution No. 63. This is a resolution coördinating the forces of the United States Public Health Service with the state boards of health and intended to give both a military status. This resolution has absolutely nothing to do with the matter under discussion because the essential thing we are talking about now is securing a military status for the state boards of health. We are all friends of Senate Joint Resolution No. 63, but we know that it is dead and that there never will be any resurrection.

Some have raised the question of the ability of the Surgeon General's office in the army to assume the responsibility for the efficiency and integrity of state boards of health. I think that if the Surgeon General of the army assumes that responsibility, he will discharge it. The army is the most powerful influence in this country today. Go before Congress, go before state legislatures and make an appeal on behalf of the army for anything and you will make the strongest appeal possible. It is stronger in resources, in men, and in money than any other protecting force, and if there is any other protecting force which at the same time could give us a military status besides the American army, I would like to know what it is. So much for the responsibility of the Surgeon General and the army.

Now I want you all to notice this thing about the resolutions. These resolutions are most flexible. Your board does not come within the

meaning of these resolutions until you go home, discuss them with your governor, your attorney-general, your staff, have a meeting of your board, spend six months if you wish deliberating and then sign up or not as you like. These resolutions only make possible future action. They do not commit you. They do not affect the legislative or police power of the state. That is protected by state legislatures and constitutions. We could not pass any resolutions affecting them.

Now my friends, we have been talking about this thing for a year, as Dr. Tuttle says. It has been more than a year since we have been trying to find our place. We haven't got anywhere, and this is not a time for deliberation, but a time for action. I know there are people who want to postpone these resolutions, who would do anything to sidetrack them. We have deliberated long enough and have depended upon the Council of National Defense long enough.

Some one says that if we do this, the Surgeon General of the army may take me out of my state. If he does, then he is responsible for the work you are doing and must put a substitute there. He will not take you or any one else out of the state until the country needs us. It is also said that if we go into this, it will be the last of the state boards of health; that we lose our official administrative identity. There never will be any resurrection if we lose our identity. The American soldiers had to settle that question for themselves. Men who live by faith believe in the saying that "he who will save his life shall lose it," and "he who will lose his life for the cause of righteousness shall save it."

I have just received a letter from Dr. Dowling saying that he is in favor of the resolution. Dr. Williams called me up on long distance telephone and asked me to say to the Conference that Virginia will become signatory to these resolutions. I say, and say with much gladness, that the whole South—I don't know of a state that is an exception—is coming in under these resolutions. After the war of '64 we were glad to come back. We are not afraid to trust our country to take care of us under present circumstances.

DR. OLIN, *Michigan*: On Monday night the executive committee of a committee representing the Michigan State Board of Health met in

Lansing. Our President is an ex-president of the American Medical Association, Dr. Victor C. Vaughn. The committee passed on these resolutions and Michigan, with the permission of our governor, will sign the resolutions.

DR. DRAKE, *Illinois*: I feel that I must make a statement of the position of Illinois in this matter. Expressing my personal feelings in the matter, I can say that I am in sympathy with the principle of the resolution. I do feel, however, that there are provisions in this resolution that must be considered by the chief executive of my state before I can vote for it. In Illinois we have civil service. There would be no possibility of re-filling any vacancies which may occur in the service of Illinois except through civil service channels. So far as the appointive officers are concerned, there would be no possible way of filling such positions except in accordance with the civil administrative code which provides that the health officer of Illinois shall have had, among other things, at least four years active public health experience in the state of Illinois. Those are conditions which make it impossible for me to go on record in this matter for Illinois.

I hope that some arrangement can be made to give us an opportunity to confer with our governor and then come back here and settle this question. I do not like to be put in the position of straddling the fence on this proposition, but I cannot do anything else. On the roll call I shall have to vote, under the circumstances, present but not voting.

DR. HICKEY, *Colorado*: I came here with the approval of the governor as the representative of the Colorado State Board of Health, but I came with no delegated authority to represent the state and say what the state shall do in any condition such as this. Now I may be alone in this matter, but I don't doubt at all that there are others situated just as I am. I certainly could not bind the members of the Colorado State Board of Health and our working force to any such course as is recommended here, however much I might favor it personally. That is my position. I should like to understand whether, by recording a vote in favor of these resolutions I am doing anything more than to indicate my own personal feelings, which would be favorable to them.

DR. ROYER, *Pennsylvania*: I was never so much weighted down with responsibility in my

life. I am speaking for three states, the Empire state, the Hub and the Keystone state. Speaking for Pennsylvania I cannot say that she will ever become signatory to these resolutions, if they pass. Dr. Nicoll stated last night in Committee meeting that New York was jealous of delegating any of her authority to any federal agency. I told him that New York was not alone, as we were just as jealous in Pennsylvania and certain representatives of the Public Health Service agreed. These resolutions as formulated bind our states to nothing. They are enabling resolutions which permit states to become signatory and place their personnel thereby under the army. Some states are badly crippled and we want to help them. For Pennsylvania I shall vote in favor of the resolutions. Unless the governor directs me to do it, Pennsylvania will not become signatory. It may be that we will have to, because we will be badly crippled in a little while. Two hundred and thirty of our personnel have already entered the service. These resolutions will not affect my status, as I already have a captain's commission, but have been allowed by Surgeon General Gorgas to continue my work. I am willing that all of the Pennsylvania staff shall have that same status and shall be glad to see them get it.

Speaking more particularly for New York, Dr. Nicoll feels that the state of New York, just as Illinois will not be able to become signatory because of her obligation to operate with her own staff and because of the civil service. Similar objections arise in Massachusetts and in Illinois. Dr. Nicoll desires to have New York vote in the negative on these resolutions. Pennsylvania will vote yes. Dr. Kelley will vote independently for Massachusetts.

DR. KELLEY, *Massachusetts*: There is one other point which I would like to make. There is to be a meeting of the Medical Section of the Council of National Defense in Chicago next week which will take up, among other things, the business of endeavoring to make some arrangement so that the teaching staffs of medical schools shall receive a military rating and to provide against their being disrupted. We, the sanitarians, have so far been practically ignored, but perhaps even at the eleventh hour it may be possible that if enough of us can get to Chicago and can make our predicament realized, some plan may be formulated under which we could

receive a military status as individuals without doing that which is impossible, at least for the states under civil service—of obliging all of our executive staffs to take a commission and then leaving it to the army to replace any personnel which may be removed. In the states where civil service prevails the army cannot do this.

DR. L. L. LUMSDEN, *U. S. P. H. S.*: I have hesitated to speak because I was not sure that I was in a position to say anything on this subject; but I feel as one officer of the United States Public Health Service that something should be said from the standpoint of our existing national health organization. Some of you appear to regard the Public Health Service of the United States as a forlorn hope, but I think the opportunities for this Service to do its vitally important work are now greater than ever before.

I feel that anything which concerns the state health organizations of the United States does very closely concern the United States Public Health Service, which I have the honor to represent.

I am a little hazy as to what these resolutions mean. I was at the committee meeting last night for four hours and the more we discussed the resolutions the more hazy they became to all of us. After the discussion this afternoon they are to me still more hazy.

There are one or two points, however, that appear to stand out fairly clearly. I notice in the first "Whereas" the words " . . . and prompted by their self-respect and their duty to their country at this time . . . ." It seems from the discussion so far that the gentlemen who are enthusiastically interested in the adoption of these resolutions have laid a little more emphasis on the self-respect or the popular respect than on the duty to be performed. It seems that what is desired is a military status so that your friends and neighbors can say that you are going to war by staying at home and doing your duty.

I am trying to consider this proposition from an entirely unbiased standpoint—as an officer of the United States Public Health Service who has been working for twenty years, doing everything in his power for closer coöperation between the health agencies of this country, not only in organization and status, not only in printed reports, but actually in the field with pick and

shovel methods, working to clean up dirty conditions. Looking at it from a strictly selfish standpoint, however, if the state health departments were to go out of business, a strong argument would thereby be furnished for a greatly enlarged national health service; because if the state health organizations got off the job, the work they are doing would have to be done by others. Gentlemen, this work has got to be done. I don't believe we are going to be so stupid in the heads of our departments, in the brains running this great war business for the United States, as not to see clearly that this work of conserving human life, strength and energy, is essential war business and must be done.

I have noted in no state in which I have worked, and I have worked in about thirty-two, shoulder-to-shoulder with state health officers, no tendency among state health officers to subordinate themselves to any department of the federal government. Yet I notice at the end of these resolutions that you are endeavoring to put your entire executive staffs under the Surgeon General of the army. If you believe that is the best way to do your duty at the present time, in the name of Heaven, do it that way!

I understand that some of the gentlemen in the office of the Surgeon General of the army are enthusiastic about the plan proposed in these resolutions. A short time ago the same gentlemen were enthusiastic, apparently, about having the Public Health Service, with its functions especially, and its personnel incidentally, transferred to the War Department. That matter was taken up by the Secretaries of War and the Treasury and the President of the United States, and these three great statesmen, after careful consideration of the subject, decided unanimously that it would be a mistake to transfer the Public Health Service to the War Department or the Navy Department or to any other department at this time; that this great civil health work must be done and that the national government, through its proper health agency, had a very important part to play in its performance.

I think there is a big principle involved in this proposition which you are now considering. Every man, woman and child in the country who has any intelligence, any spark of patriotism, is willing to make every effort, however much it may mean in the way of sacrifice to

help win this war. We should be willing to sacrifice the respect of our neighbors and friends, if necessary, to do our duty today. I have no doubt but that at meetings of farmers, of coal miners and of other war workers, that this same subject comes up. Why should not the farmers who are past the draft age be given military status and the full honors of war while they perform their necessary war work of raising more and more wheat and cotton? In view of the sacred cause for which we are fighting in this war, I believe today in the bottom of our hearts we know that every one of us who is a loyal American and who without regard for chances of self-glorification is doing his best to render effective service and in whatever field of opportunity he may be has a military status and holds a commission from the highest authority,—God Almighty!

DR. DAVIS, *Texas*: Am I right in understanding that this is practically a request to the President to submit to the states for adoption some plan by which the state boards of health may be protected? Am I right in thinking that? Do I bind my state to these resolutions by voting for them?

THE PRESIDENT: From the discussion here there seems to be a difference of opinion on this point. Dr. Rankin, will you answer the gentleman from Texas?

DR. RANKIN, *North Carolina*: The resolutions only become binding when the man takes them back home, goes over them with his governor and attorney-general, and if they do not sign the resolutions, they never become binding.

DR. DAVIS, *Texas*: The Texas State Board of Health could not enter into such an agreement, but I want to say that in order to get this matter before the proper authorities, I will vote in favor of the resolutions because I realize the necessity of doing something. Now if our state university and medical college can be recognized in such a way as to place them under the army without enlisting, and if in Texas professors in the medical department of the university may be recognized so as to be retained as part of the staff in this university, I shall surely vote in favor of any plan which will provide for taking care of the health authorities in the same way.

DR. DRAKE, *Illinois*: Before the vote is taken I want to be informed on this one point: Through what channels will this matter be

presented to the state? Will it be presented by the President to the state government, or will it be presented by the Surgeon General to the governor or to the state health officer? It makes a very great deal of difference.

THE PRESIDENT: There is nothing in the resolutions so far as I can see as to the best method for submitting them.

DR. RANKIN, *North Carolina*: The resolutions will go from here to a committee and then to the President. If he approves them the state can then take the initial step by holding a meeting, sign up after due deliberation and then place the resolutions before the Surgeon General of the War Department.

DR. COGSWELL, *Montana*: One year ago the State Board of Health of Montana passed a resolution delegating or placing itself under the United States Public Health Service in so far as the constitution of the state of Montana would allow. That resolution stands upon the minutes. Now I don't see how at the present time I could sign these resolutions without first bringing them before my board.

DR. A. J. McLAUGHLIN, *U. S. P. H. S.*: No matter what may be said as to the intent of these resolutions, it transfers authority, so far as the federal government is concerned in the states, to the Surgeon General of the army. I know that Dr. Rankin and Dr. Hayne are the last men in the world to do anything to injure the Service, their motives are good, but the interpretation of these resolutions will reflect upon the Public Health Service. The state health organizations have always looked to the Service for guidance and these resolutions change the direction. If that direction is changed it will reflect upon the Service, and nothing that Dr. Rankin can add to contradict this impression will help matters at all. The passage of these resolutions will be considered by the man on the street as a clear indication that a reflection on the Public Health Service was intended, and gentlemen, I am not willing to concede that the Service has failed in any of its duties, and I don't believe that any man in this room can say so.

DR. HAYNE, *South Carolina*: Can the Public Health Service confer a military status?

DR. McLAUGHLIN, *U. S. P. H. S.*: If that is what you want there are other ways of getting it without transferring your authority to the Surgeon General of the army.

DR. WELCH, *Alabama*: I want to clear myself of any reflection on the United States Public Health Service. All I require in Alabama is some arrangement to keep my force from being disrupted so that I will be in a position to work with the Service.

DR. DRAKE, *Illinois*: In an explanation of my vote, I feel it is absolutely necessary that I shall be recorded as present but not voting. I want to correct the impression that I may have made that Illinois will not become signatory to these resolutions. We will, provided it is possible to do so, but I must leave that decision with our governor.

DR. DAVIS, *Texas*: I vote for these resolutions for the reason that if I voted against them there would be no manner or method of getting the matter submitted to the proper authorities.

DR. JEPSON, *West Virginia*: A word of explanation. I shall vote no on this proposition, but at the same time my sympathies are with the young men pushing this matter. I rejoice in their altruism, but believe that the same result could be accomplished by a resolution from this body to the Surgeon General setting forth the necessity of our services at home and asking that we be left untouched.

DR. HAYNE, *South Carolina*: Mr. President, I will ask that the roll be called by states on these resolutions as amended.

The Secretary then called the roll with the following result:

Ayes: Alabama, Colorado, Connecticut, Florida, Georgia, Kansas, Louisiana,\* Maine, Michigan, Mississippi, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, Vermont, Virginia.\*

Nays: California, Maryland, Minnesota, Montana, New York,\* North Dakota, Utah, Washington, West Virginia.

Present but not voting: Iowa, Massachusetts, New Jersey, Illinois, Rhode Island, Tennessee, Hawaii.

Absent: Arizona, Arkansas, Delaware, District of Columbia, Idaho, Indiana, Kentucky, South Dakota, Wisconsin, Wyoming, Missouri, Nebraska, Nevada, New Hampshire, Ohio, Oklahoma.

Accordingly, the resolutions for coordinating state boards and departments of health with the office of the Surgeon General of the United States army, as amended, were adopted.

On motion of Dr. Rankin it was voted that a special committee of three be appointed and instructed to bring the above resolutions to the notice of the President of the United States.

See also pages 43, 73.

\* Permitted to vote by proxy.

## CHILD CONSERVATION.

### ACTIVITIES OF THE AMERICAN RED CROSS FOR CHILD CONSERVATION.

TALIAFERRO CLARK,

*Surgeon, United States Public Health Service, Director, Bureau of Sanitary Service, American Red Cross.*

THE organization of Red Cross societies received initial impulse through the publication of a book, in 1862, by Dunant, an eyewitness to the battle of Solferino, in which he portrayed most vividly the suffering and neglect of wounded soldiers who lay on the battlefield occasioned by the inadequacy of surgical, nursing and hospital facilities. The general

interest aroused by Dunant's book and by his lectures resulted in the calling of the first Geneva Convention, in 1864, and the subsequent formation of societies to train nurses and assemble supplies, in time of peace, with which to supplement inadequate resources of regular military establishments in war.

Popular conception of Red Cross ac-



tivities, up to very recent date, has been that they were directed solely along these lines. The scope of its activities, however, has been broadened from time to time to meet the needs of more recent periods until the American Red Cross, at least, has become a great emergency instrument through which the whole people give practical and immediate expression to the national spirit of humanitarianism, sympathy and helpfulness. In addition to the primary purpose of its organization the American Red Cross under terms of its charter is authorized to extend relief to the civilian population in times of epidemic or disaster, and to study and promote the means of prevention of conditions harmful to the civilian population.

#### CHILD CONSERVATION IN BELGIUM.

Despite the great demands on Red Cross assistance occasioned by the military necessities of the war, the Red Cross has not faltered in the discharge of its peace time functions. Indeed a large part of its present activities is directed toward the relief of civilian populations, some of them having a direct and others an indirect relationship to child conservation.

The greatest expenditure of effort by the Red Cross directed for child conservation has been through the Department of Foreign Relief, with special reference to the children of Belgium and France. You are all familiar with the situation in Belgium following German occupation—the disappearance of civil administrative authority, the destruction of property, the dispersion of families, the near starvation status of the civilian population that called for prompt and strenuous action by the Red Cross, which gathered in thousands of Belgian children and fed them and clothed them and ministered to their bodily ailments. Of equal if not of greater importance than all this, is Red Cross assistance and inspiration that was so largely

instrumental in educational opportunity being afforded these little ones in order to better train them for the rehabilitation of their country.

The Red Cross has appropriated for the relief of Belgian children to date the sum of \$436,004.

#### ACTIVITIES IN FRANCE.

In France the activities of the Red Cross for child conservation have been and are now very extended.

On July 28, 1917, the Red Cross, in coöperation with the French authorities founded a center near Toul where medical and social welfare work could be carried on in behalf of the children for miles around, and where mothers and children from the villages subject to gas bomb attack can live in relative safety. This refuge is operated by a staff of nine persons. In addition to this refuge hospital, there has been established a children's hospital of 80 beds at Toul, and at Luxembourg a children's hospital and dispensary with a staff large enough to supply medical care and supervision to the whole district, by sending doctors to different towns to hold clinics at regular periods. The total number of cases treated in six towns near Toul and Nancy up to January 1, 1918 is 3,925; the total number of cases cared for in the hospital of Toul is 234; and on January 1, 1918, there were 68 children in the hospital and 466 at Aisle.

At the little French town of Evian-les-Baines to which repatriates who have been held in Belgium or Northern France have been sent by the Germans, babies, young children, and old men and women are arriving at the rate of 1,700 a day.

Over 9,000 were examined in the arriving convoys during February, 1918. About 60 per cent of these repatriates are children and all are in a state of great destitution. Cases of measles, scarlet fever, diphtheria, and pneumonia are common

among them. The Red Cross Children's Bureau opened on November 5, 1917, at the request of the French Government and local committee, an "acute" hospital of 150 beds for children, in charge of a medical staff, to care for cases of these contagious diseases entering at Evian, otherwise they would be scattered through France and become possible foci of epidemics.

The capacity of the hospital is now 200 beds, with a daily average of 170 cases. The record of this hospital for two months service was 376 children treated in the hospital and 292 children treated in the dispensary, and 268 dental cases treated and 13,708 children examined by American physicians.

From Evian, convalescent children go to Lyons and thence to the Chateau des Halles, the convalescent hospital for children which was given to the Red Cross by the Lyons Hospital Committee. This hospital has a capacity for 120 beds and was opened November 22, 1917.

A dispensary service has been inaugurated in Paris consisting of seven units, two of them in conjunction with the Rockefeller Commission. A school for district nursing has also been established in which French nurses, who have had hospital training, are being taught district nursing.

In addition to these conspicuous examples of the work of the Red Cross for child conservation, hospitals, both general and special, and dispensaries have been established at other strategic points, from the health standpoint, for general medical relief and for the control of tuberculosis.

#### INFANT MORTALITY CAMPAIGN IN FRANCE.

Finally, of especial interest is the campaign against infant mortality in France undertaken by Red Cross Children's Bureau in connection with the Rockefeller Commission.

A traveling exhibit has been prepared consisting of posters, pictures, moving pictures, literature, with lectures and nurses for the demonstration of the methods of saving children's lives.

On February 1, 1918, the bureau was reaching 71,000 children and had a total personnel of 201.

"Under the slogan 'Visit every baby born in France in 1918' the above mentioned campaign had three main objects: (1) To increase the nursing service in France in the direction of child welfare work; (2) to increase welfare stations all over the country, one or two, if possible, in every province; (3) to help all hospitals and clinics and Goutte de Lait or any other organization doing children's work, and to secure the best possible assistance in their child welfare propaganda."

The Red Cross has appropriated from the first war fund for work in France for the Care and Prevention of Tuberculosis, \$2,147,327 and for the Care of Needy Children and Prevention of Infant Mortality, \$1,149,129.70 in addition to appropriations for other purposes.

The Red Cross has appropriated, in addition to funds for other purposes, \$52,870 for relief work for Italian children; \$53,000 for condensed milk for Russian babies; \$2,580,368.76 for relief work for both military and civilian population and other general relief work in Roumania; \$502,453.77 for general relief work, dental and surgical supplies, food-stuffs and other relief supplies in Serbia; and \$23,800 for infant welfare and maternity centers in Great Britain.

Mention has been made of specific sums advanced by the Red Cross for child welfare in order to indicate more clearly the magnitude of the work as represented by these expenditures. The question naturally arises, in view of the comparatively large sums expended, are these expenditures worth while? The answer is plain.

This assistance is extended to a people whose ideals of civilization have been shattered by a merciless and ruthless foe, who have lost a large part of their tangible property; who have nothing left upon which to found the hope of the future except their children. Therefore to quote the language of a Red Cross report March 19, 1918, No. 26:

"If the American Red Cross can keep the health of the children good and thereby give that great encouragement to the grown ups, that their children—all they have left—are well cared for, new life will quickly develop there where the old has been blotted out."

#### ACTIVITIES IN THE UNITED STATES.

The activities of the Red Cross for child conservation in the United States though potentially enormous are at present indirect, with the exception of relief afforded families of soldiers and sailors through the Home Service Bureau of the Department of Civilian Relief. The object of this relief is "to maintain the welfare of their families at home, assuring for them health, good spirit, and, so far as possible, their normal standards of life."

A number of institutes have been established throughout the country for the training of workers for Home Service. Courses are given in health instruction embracing important particulars of general and personal hygiene and the health of mothers and babies with especial attention to care of expectant mothers.

#### INSTRUCTION IN ELEMENTARY HYGIENE AND HOME CARE OF THE SICK.

The Department of Nursing of the American Red Cross has inaugurated a course of instructions in Elementary Hygiene and Home Care of the Sick. Approximately 50,000 women in the past year have taken this instruction. It is estimated that this number will be increased

fifty-fold during the present year. The object of this course is "to instruct women in the simple principles of personal and household hygiene." The course is largely educational and does not qualify a woman as a professional nurse. This action is primarily a war measure and is intended to so instruct women as to enable them to assume the responsibility of the care of the sick in their own homes, thus releasing graduate nurses for duty both at home and abroad.

The course consists of fifteen lessons and is designed to impart a knowledge of bacteria and their relation to health and diseases; of the causes and mode of transmission of disease; of personal and public agencies concerning health and welfare, and of the hygiene of infancy and childhood.

#### TOWN AND COUNTRY NURSING SERVICE.

The Red Cross has established also a bureau for supplying nurses for town and rural nursing on request of responsible organizations such as state and local health departments, philanthropic associations and industrial institutions.

Supervision is maintained through active correspondence by the bureau, and through visits by the Red Cross supervising field nurses.

The duties and activities of the nurses are modified according to local conditions. In communities where tuberculosis, malaria, hookworm or typhoid fever control is the most pressing problem, town and country nurses not only engage in the nursing problems created by the presence of these diseases in undue proportions, but also in an educational program for the eradication of these diseases through practical application of the principles of hygiene in the homes of the sick. Special emphasis is placed on child welfare work by these nurses through their employment in schools, in home visiting, in clinics held

for healthy children where mothers are taught prenatal care, as well as care of nursing children, including feeding. Over one-hundred nurses have been appointed by the Red Cross for this special work.

#### JUNIOR MEMBERSHIP.

Another instrument of great potential usefulness for child conservation is the Bureau of Junior Red Cross Membership organized under the Department of Development September 3, 1917. The plan of junior membership received the commendation of President Wilson in a proclamation issued September 15, 1917, in which he used these words:

"Our Junior Red Cross will bring to you opportunities of service to your community and to other communities all over the world and guide your service with high and religious ideals. It will teach you how to serve in order that suffering children elsewhere may have the chance to live. It will teach you how to prepare some of the supplies which wounded soldiers and homeless families lack."

The work of the junior membership has been primarily educational. It aims to prevent and overcome tendencies to juvenile delinquency and truancy that have so enormously increased in the warring countries of Europe, and, in this connection, bring the teachers of the country to a realization of the responsibility of saving the children of our country.

"In the school the Junior Red Cross gives in concrete form of the simple things to do, ideals and standards of social service and patriotism by teaching them to care for the well-being of their communities through active work in communities, cleaning up towns; protecting property; birds and animals; by increasing their personal efficiency through the study and practice of home and personal hygiene, first aid, dietetics and care of the sick; by focusing the work already undertaken in manual training and domestic science classes on the preparation of war relief supplies, thereby giving the school children a real part in the national responsibility of citizenship."

In one school year, the Junior Red Cross attained a membership of 8,000,000 members, representing every state in the Union.

Finally, the Red Cross offers wonderful opportunity of expansion of its present educational propaganda. With its enormous resources, with thousands of trained workers offering volunteer service, with a membership of over 20,000,000 persons, operating through 3,884 chapters, 13,229 branches and treble this number of auxiliaries established in every section of the Union, the Red Cross offers unparalleled facilities for coöperation with other agencies and especially with health administrative organizations for putting into effect a desirable program for child conservation.

## THE WORK OF THE MASSACHUSETTS STATE DEPARTMENT OF HEALTH AND OF THE WOMEN'S COMMITTEE OF THE COUNCIL OF NATIONAL DEFENSE ON CHILD CONSERVATION.

MISS MARY BEARD, R. N.,

*Member, Massachusetts Child Conservation Committee.*

IN THE very early days of the war Dr. Allan J. McLaughlin, at that time commissioner of health in Massachusetts, declared his conviction that conservation of the children of Massachusetts is an important war measure. In taking this stand he aligned himself with the President of the United States who has recently made this statement: "Next to the duty of doing everything possible for the soldiers at the front, there could be, it seems to me, no more patriotic duty than that of protecting the children, who constitute one-third of our population." There were many persons at that early time who did not agree with either of these gentlemen and in Massachusetts Dr. McLaughlin, finding it difficult to persuade the Committee on Public Safety on this point, decided to take the matter into his own hands and develop Child Welfare Work as a war measure within the Department of Health itself. It is amusing now to look back to that time and remember that while child conservation was hotly disputed as having any relation to the winning of the war a ready and general recognition was found for the conservation of such trivial things as old newspapers and old tin cans!

Dr. McLaughlin's plan of organization was built upon the principle which he so consistently applies to all health work, namely, that there are three essentials to successful community health work in this country:

I. The Health Authority, Federal, State, or Municipal.

II. Professional Workers (doctors and public health nurses), and

III. The Public, without whose moral and financial support we can expect no lasting results.

To the public health nurse Dr. McLaughlin gives a very honorable position for it is she who must interpret to the people the truths discovered in the laboratory and since in America we can not endorse legislation which the people do not recognize as necessary it is the public health nurse who must by her powers of persuasion win over the people to desire community health so much that they will obey the laws which govern it.

In Massachusetts 10,000 babies under five years old of which 4,000 are under a month old die annually. At least one-half of these deaths are preventable.

A paper recently prepared by Miss Gertrude Peabody, vice-chairman of the Child Welfare Section of the Massachusetts Women's Council of Defense contains so good an account of the Massachusetts plan as it is working out that, with Miss Peabody's consent, I will quote it here.

"The Massachusetts Department of Health, therefore, laid its plans to conserve the children of the Commonwealth as follows: A Committee on Child Conservation was appointed, with Dr. David Edsall, a member of the Council of the Department of Health, as chairman, and

two physicians from the department. To this official group were added two pediatricians, an obstetrician, and a public health nurse. The interests of the defective child were also represented by two specialists who were to serve in an advisory capacity. This committee appealed for help to the Metropolitan Chapter of the Red Cross, and a special fund was raised to meet this war emergency of the civilian population. With the money thus assured to pay the salaries, the committee engaged eight public health nurses, who under the title of supervisors, were to make investigations throughout the state as to child welfare conditions. The state of Massachusetts is divided for its health-work into eight districts, and to each district is assigned a district health officer, representing the Department of Health. The supervisors are under the absolute control of the Committee on Child Conservation, but one is assigned to each of the health districts and works in close coöperation with the health officer, and is introduced by him to each local board of health. In this way, her official connection is established. This, however, the State Committee knew was not sufficient to assure the desired results. The interest and active support of the entire community must be aroused if the infant mortality rate was to be materially reduced. The State Committee therefore turned to the Women's Committee of the Council of National Defense, already organized in Massachusetts as in every other state, with a unit in every town. Because of Miss Beard's connection with the Department of Health Committee she was made state chairman of the Child Welfare Department. This department was asked by the State Committee to co-operate with it in carrying out its program, which it thereupon proceeded to do by promoting the formation in each town of a Child Welfare Committee under the local Unit. The way for the supervisor has thus

been cleared, and she has in each town this double point of contact, with the official board of health, and with the semi-official committee of citizens. The surveys made by the supervisors include all conditions pertaining to the health of the child. Vital statistics are collected, the public and private opportunities for care of health are summarized, and criticism and commendation are freely offered. The general industrial and economic conditions and the housing conditions are noted. Indeed, a very clear picture of local conditions is presented, and one made strictly for the benefit of the State Committee, to whom it is submitted. The committee then considers it in detail, and any suggestions from the health officers which throw additional light upon the problem are welcomed. Recommendations are then made as to how the care of babies can be improved, and are embodied in a letter to the chairman of the local Child Welfare Committee. At the same time a letter from the commissioner of health, covering the same recommendations, is sent to the chairman of the local board of health, again utilizing the two channels, the official and the citizen group, by which the improvements should be carried out.

The State Committee set for itself, as the most important war measure, the definite task of reducing the death-rate of babies. In doing so it in no wise minimized the importance of the other aspects of child conservation, dealing with the care of the older child, with education and recreational problems, with child-labor and housing laws, and with family income. All these problems and many others have direct bearing upon the child. Some have been studied, and considered, and acted upon for years in Massachusetts, with varying degrees of success. Some will follow naturally from the present program of the State Committee. The foundation of a Child Conservation Program lies, how-

ever, in the saving of mothers' and babies' lives, and assuring the babies a healthy start in life. This can be best done by public health nurses, and every community which can be persuaded to employ a public health nurse or to add to its staff of public health nurses is making a definite advance in child conservation as a whole, because the public health nurse will be the first to recognize and bring to the attention of the community for correction any serious condition detrimental to the health of the children. Furthermore the war pressure demands immediate results, and a specific program will be universally adopted, whereas a complicated one may offer such difficulties to those undertaking to carry it out as to retard the accomplishment of any part of it.

The Massachusetts Committee on Child Conservation therefore outlined the following Baby Hygiene Program. First, is the enforcing of Birth Registration laws. Without prompt and thorough birth registration the necessary care immediately after the birth of the baby can not be assured. Second, is the providing of prenatal care and instruction. This care, skilfully and thoroughly given, offers, the physicians tell us, the surest and quickest returns in the saving of lives. Indeed this has been proved many times. The Metropolitan Life Insurance Company is paying for prenatal visits of its Industrial Policyholders as a business investment. The Boston District Nursing Association has proved it again this year. Ten per cent of all registered births in Greater Boston received prenatal visits from the nurses. Among those visited, the infant mortality rate in the first two weeks of life was 11.90, whereas the rate in the corresponding period among babies where prenatal care had not been given was 34.19, a reduction of more than two-thirds. Third in the program is the providing of adequate nursing and medical care at confinement.

Fourth, the providing of systematic supervision for the well and sick baby and young child until it reaches the school age and comes under the care of school authorities. Practically no organized care for the health of the child of one to five years is provided in Massachusetts or in this country, and yet in these years physical defects develop which if recognized can easily be cured, but if neglected become serious in afterlife. More than one-third of the cases from which exemption from the draft in Massachusetts has been granted because of physical defects, were due to causes preventable in early youth. Here is an amount of waste and inefficiency which no country at war with Germany can afford.

Side by side with this medical program, an educational program is being carried on in Massachusetts. Preventive medicine is still a comparatively new science, and is to a large extent unrecognized in its relation to maternity and infancy. Its possibilities and actual accomplishments in this connection must be presented clearly and repeatedly to the public, so that the demand for this care shall be so universal as to ensure its being supplied. The material for this educational propaganda is being distributed weekly to the local Child Welfare Committees and published in the newspapers throughout the state. In addition, the Baby Hygiene Program is being personally explained. The physicians of the State Committee are presenting it to the medical groups; the supervisors are speaking at meetings in every town; Women's Clubs are having it thrust upon their attention by their Public Health Committees, and each local committee is rousing its own community to the importance of introducing and developing these measures for its own benefit.

Such is the program outlined by the State Committee on Child Conservation, and its success depends, as I have tried to indicate, first, upon the professional judg-

ment and leadership of the commissioner of health and of the State Committee, then upon the influence and initiative of the district health officers and upon the studies and tactful guidance of the supervisors, and finally upon the intelligent interest and participation of the boards of health and of the citizens in each town. To carry out its part in the state plan and secure its support by local Child Welfare Committees, the state chairman of the Child Welfare Department of the Council of National Defense, appointed a vice-chairman and a small executive committee of women who have had experience in work dealing with the health of children. The local committees, which have been appointed for the most part by the chairman of the local Unit of the Council of National Defense upon request and often after consultation, vary in their membership and activity with the needs of the community, and one has only to try to organize them to learn that no two communities in the state of Massachusetts are alike and no two like to be compared with each other. The large cities have organized on a large scale, and the committees are usually composed of representatives of all organizations working for children, and others who might be interested. Both private and public agencies in the same city have too often developed their own work without regard to that of one another, and often wide gaps in the system as a whole occur, for which the community suffers. A neutral committee, such as this representative one becomes, offers an unparalleled opportunity for the highest form of coöperation and co-ordination, with the ultimate aim of carrying out the ideal plan presented to it by the State Committee on Child Conservation, and the added incentive of taking a creditable part in the state plan.

It was in October, 1917, that the first Child Welfare Committees were formed, and the supervisors began to make the

surveys. The National Program for Children's Year, published in Washington in February, fortified the state program and offered fresh incentive to every committee. The weighing and measuring test for babies under five years of age was a welcome addition in the Baby Hygiene Program and was seized upon with enthusiasm by many committees. All communities not heretofore approached about Child Welfare Work were asked to organize immediately to start Children's Year."

On May 25th the following summary of results was submitted by Miss Pansy Besom, chief of the Child Welfare Supervisors.

#### SUMMARY OF RESULTS

1. Number of extra nurses to be employed by municipalities under board of health:
 

Child Welfare Work.....	11
General Public Health Nursing.....	4
2. Number of extra nurses to be employed by private organizations:
 

Prenatal Work.....	2
Child Welfare Work.....	4
Prenatal and Child Welfare Work.....	10
3. Number of new child welfare stations opened by
 

Boards of Health.....	3
Private Organizations (Boston included, 2) ..	5
4. Number of prenatal clinics started at
 

Hospitals, or in connection with.....	4
Board of health offices.....	3
Free beds at hospitals for obstetric patients ..	2
5. Number of prenatal nurses already placed for
 

Prenatal Work.....	1
Child Welfare Work.....	4
6. Education work only:
 

(By literature, lectures, etc.) Places.....	3
---	---
7. Child Welfare League organized in Malden.
8. Visiting Nurse Association organized in Williamstown.
9. Well baby clinic to be opened soon in East Hampton.
10. Beverly: Prenatal and Infant Welfare Clinic to be opened as soon as a nurse is secured.



11. Wellesley: The Friendly Aid will provide extra nourishment to expectant mothers and children.
12. Boston: Liberty Milk Shop opened. Child Welfare House on Boston Common. Weighing and measuring being carried on.
13. Weighing and measuring being carried on. Boston, 60,000 children under 5; 30,000 weighed and measured.

Miss Peabody has now over two hundred chairmen for the local committees. This leaves about one hundred townships in the state without a chairman but most of those have a population of under 1,000 each and present essentially rural problems.

The immediate result of the Child Conservation Program is a demand for more public health nurses.

Massachusetts in making public health nurses conspicuous in plans for reducing baby deaths in the state this year has made open recognition of the necessity for public health nurses in effective health work of any kind.

Such recognition is rapidly being given the public health nurse wherever the modern health officer and the enlightened public are working together. It is true that the public health nurse is recognized as necessary to any effective health work, but it is astonishing how slight is the recognition given to the fact that public health nurses have had a continuous existence in this country for a period of thirty years.

In the many campaigns against the various diseases which threaten the public safety, visiting nurses have taken an important part from the days of the first tuberculosis nurse through the early struggles to introduce school inspection in the effort to lessen epidemic diseases of children down to the tragic days of the poliomyelitis scourge two years ago, the public health nurse has been found the necessary link without whom there can be no connection between the sanitarian and the public.

Moreover, the boards of directors of

these unofficial health organizations have been in many instances responsible for the introduction into the City Department of Health of those health nurses now found quite generally working under the direction of such official bodies.

Little recognition is given to the fact of the continuous existence of the public health nurse for more than a quarter of a century and even less is given to the inevitable corollary of such a continued existence, namely, that certain essential standards of organization and administration have grown up around these nurses and have become so well established as necessary to securing efficient results in public health nursing work that they are almost universally adopted throughout the country by the *unofficial* health organizations employing public health nurses. The emphasis on "unofficial" organizations is intentional because at present few *official* health bodies have come to such a recognition or to an adoption of the policy which years of experience have evolved and shown to be necessary for the most efficient work of the public health nurse. This policy of work for the public health nurse concerns such simple matters as:

1. The preparation of the nurse.
2. The salary necessary to secure the best public health nurse available.
3. The necessity of making one public health nurse chief of her department with the same authority over the other nurses that in a hospital is exercised by the superintendent of the Training School for Nurses.

Thirty years of experience have produced much that is of value as a guide in developing public health nursing. Do many of you gentlemen know that there is a National Organization for Public Health Nursing which was created primarily to gather the experience of those thirty years, and to pass on those standards? Do many of you belong to it? We need you quite as much as the directors of the un-

official societies. Do you know there is an official magazine "The Public Health Nurse Quarterly"? It is a good magazine. Do many of you take it? Have you read that admirable book called "The Public Health Nurse" brought out by Macmillan two years ago, written by Miss Mary Gardner of Providence? It contains invaluable information for any one dealing with the problems of public health nursing for it is based upon the carefully compiled experience of thirty years.

During the past year when public health nursing has had so many unusual demands made upon it the Rockefeller Foundation voted to allow the National Organization for Public Health Nursing a grant of \$15,000, \$10,000, and \$5,000 respectively for 1918, 1919, and 1920 because it is the belief of the Foundation trustees that standards

of public health nursing are necessary to be promoted at this time in public health development.

Endorsement by Dr. Simon Flexner, Dr. Wycliffe Rose, and Dr. William Welch show that a value may justly be ascribed to these standards and methods of administering public health nursing and yet is it not true that sanitarians and health officers have been long in seeking the means of applying such standards and methods of administration in the public health nursing work directly under their own control.

The next few years will see great advance in this direction for the Federal Public Health service and the National Red Cross are very rapidly advancing public health nursing work and one never finds great expansion of any valuable work without the recognition and adoption of standards.

## CHILD CONSERVATION IN ILLINOIS.

C. ST. CLAIR DRAKE, M. D.,

*State Director of Public Health, Springfield, Ill.*

**P**RIOR to the enactment of the Civil Administrative Code in 1917 by virtue of which the present State Department of Public Health was created, the old State Board of Health of Illinois carried out child conservation work in a more or less desultory way in connection with its general public health activities. The work of the board in the prevention of blindness was quite sufficiently organized under the provisions of a special law and this service was rendered the more efficient by coöperation with the Illinois Association for the Prevention of Blindness.

The board had prepared considerable literature dealing with child welfare and was responsible for the carrying out of a large number of child welfare and better baby conferences throughout the state. The board also developed exhibit material

on child conservation with motion pictures, stereopticon slides, and similar publicity matter which was shown at public gatherings in the various communities. On the whole, however, the work was not systematized nor efficiently organized.

It was until July 1, 1917 when the Civil Administrative Code went into effect and when the State Department of Public Health was created that child welfare or child conservation was accorded the dignity of a separate division of its own in the department organization. At that time a division of child welfare and public health nursing was established with a chief of the division and two public health nurses who unfortunately were compelled to divide their time between this division and the division of communicable diseases.

The child welfare work formerly carried

out by the state board of health was systematized and placed on a better basis and the newly created division encouraged the mapping out of a definite program in which it would have the coöperation of the stronger extra-governmental agencies of the state.

The principal agencies thus brought together in furthering the Illinois program were the Child Welfare Department of the Woman's Committee of the Council of National Defense, the Elizabeth McCormick Memorial Fund, and the Department of School Activities of the Illinois Tuberculosis Association.

The program which is now being effectively carried out consists of the following essential points:

1. A coöperative effort to secure 100 per cent registration of births and deaths, utilizing for this purpose the thousands of women registered by the Woman's Council of National Defense for war-time service.

2. The employment of a community nurse in each of the one hundred and two counties of the state to which end a tremendous impetus has been given during the past year by the widespread interest in the tuberculosis war problem of Illinois, and the preparation on the part of counties and communities to care for returned tuberculous soldiers. This has led to the employment of a very large number of community nurses whose work covers the entire range of public health with definite accent upon child conservation.

3. The development of a plan for training nurses for public health work to meet the increasing demand for such service. This has culminated in the creation of the Illinois course for community nurses which will be conducted at Springfield beginning this month under the direction of the State Department of Public Health, the State Department of Public Welfare, and the Illinois Tuberculosis Association, with the coöperation of the Chicago School of Civics

and Philanthropy and the Elizabeth McCormick Memorial Fund.

This course will be brief in duration on account of the urgency and the demand for nurses which has been rendered more acute by the inroads of the American Red Cross upon the forces of public health nursing organizations. The course is designed especially to meet the needs of smaller communities. There are no fees or charges, but all nurses taking the course are obliged to accept positions in public health nursing service in Illinois.

4. Steps leading to the establishment of a school for midwives to meet the new requirements of the state law and as a means of lowering the infant mortality.

5. The further development of the system of clinics for crippled children and the victims of poliomyelitis, beginning with the undue prevalence of infantile paralysis of a few years ago. The State Department of Public Health has established and maintained in a number of the larger towns scattered throughout the state, clinics for crippled children and for the after-treatment of the victims of this peculiar disease. At the present time there are about five hundred children receiving treatment at these clinics and the entire work is conducted at minimum expense, inasmuch as quarters and clinical assistance are furnished by various local hospitals; the director of these clinics being accompanied by one nurse from the Department of Health in his trips over the clinic circuit.

6. Through the activity of the Division of Child Welfare and Public Health Nursing, better baby contests have been held in many sections of the state. Maternity clinics are being established and a considerable number of child welfare stations have been organized under the direction of local physicians whose special interest in this line of work has been enlisted.

7. The encouragement of school nursing, medical school inspection, and the estab-

lishment of open air schools and open window rooms. These school activities have been materially strengthened through the organization of school children into open air crusaders or modern health crusaders in a large number of counties in the state. In the creation of these health organizations of school children the county and city superintendents of schools have been found particularly responsive. The State Department of Public Health has issued a special circular on the organization of modern health crusaders and a certificate of membership which is presented to each child carrying with it the health pledge of the organization.

8. In the creation of a central supply station for child welfare exhibit material, the State Department of Public Health has materially increased its mechanical models, posters, cartoons, stereopticon slides, etc.; and the exhibit material of all of the extra-governmental coöperating agencies have been catalogued in the offices of the department so that there is made available a complete catalogue of all exhibit material which may be obtained by loan for the uses of the various communities.

Through the chief of the Division of Child Hygiene and Public Health Nursing, the full-time state district health officers have been made conversant with the aims and purposes of the child conservation program and have created interest in the plan throughout their own districts and added interest has been given to the activities of the field representatives of the de-

partment and the employees of the several coöperating agencies.

The fact that this is the children's year, so designated by the Federal Children's Bureau, has made it a particularly favorable time for launching and developing a plan of state-wide child welfare activity.

Unfortunately in Illinois the Division of Child Welfare and Public Health Nursing was one of the newer divisions of the state health organization which was compelled to yield in appropriations and employees at the time of the reorganization of the State Department of Health that the longer established divisions which were regarded as more vitally important might not suffer through the general policy of retrenchment.

Within the past year however, the subject of child conservation has excited such great public interest that I am impressed that the next General Assembly will regard this division as worthy of materially increased appropriations. It is intimated that those governmental activities which are not thoroughly essential to time of war will be restricted in their appropriations in the next session of the legislature, but European experience has created a definite sentiment that child conservation is not a subject which can be safely slighted at a time when the young men of the Nation are being sacrificed in large numbers. In fact, I am inclined to believe that appropriations liberal in amount can be obtained for this branch of activity on the ground that child conservation is a vital and essential war-time activity.

## CHILD CONSERVATION IN PENNSYLVANIA

DR. B. FRANKLIN ROYER,  
*Acting Commissioner of Health.*

Our child conservation program in Pennsylvania beginning in an educational way in 1905 elaborated with our school inspection program starting in 1910, greatly broadened in 1911, reaching practically all children of school age, supplemented by active Baby Saving Campaigns from 1912 to 1917 and by the Marriage License Act of 1913, and the supervision of midwives in 1915, has been further elaborated recently. In February of this year, the late commissioner of health, Dr. Samuel G. Dixon, appointed Dr. Samuel McClinck Hamill as chief of a new division of child hygiene. This division contemplates utilizing all forces of the department having anything to do with infant welfare and child welfare, and in addition has planned a state-wide organization of volunteer workers including all various subdivisions of the Child Welfare Department of the Pennsylvania Division of the Women's Committee of the Council of National Defense, Department No. 5, and the Child Welfare Division of the Committee of Public Safety, and all allied welfare agencies, such as the Parent-Teachers Association, and its subsidiary branches, the Federation of Women's Clubs and their subsidiary branches.

In perfecting this organization a County Unit Plan has been adopted with subsidiary units corresponding to the cities, boroughs, towns and rural school districts, the cities and towns being subdivided in most places by voting precincts.

The personnel of the county committee always includes local representatives of the State Department of Health; local representatives of city or borough boards

of health, any physician especially interested in child problems; representatives of health nursing agencies of women's clubs, influential business and professional men interested in child problems and persons interested in women employed in industry.

The plan of work is to first effect definite understanding with all existing agencies that this county committee is formed for the purpose of aiding and coördinating existing agencies and creating sentiment in favor of efficient child welfare work, and for enlisting the active aid of physicians and nurses in all problems affecting the life and health of children. We are interesting and enlisting volunteers for all rural and small town communities, seeking persons of good judgment and fair education to do that which we ordinarily would hope to do through nurses and other trained social workers, and are planning to place in their hands such information and terse sanitary preachments as may seem advisable for wide spread dissemination to all classes who may need help. Through the county committees and their subsidiary organizations we hope to reach every isolated community in the Commonwealth and organize the women for the betterment of health and social conditions as they affect child life.

Through enlisting the activities of county medical societies and through the department's plans for supplying speakers or in the more remote districts supplying data for complete addresses and abstracts arranged in the form of a syllabus, we will carry our educational work home everywhere.

In order to better arouse local enthusiasm

in communities not previously reached with our traveling exhibits we plan to distribute parcels post exhibits through the county committees for display in village rural schoolhouses preliminary to the formal addresses following.

In initiating a rural campaign centered about a single schoolhouse we plan through our county committees to gather community information from this school district through the intelligent volunteers accepted by the committee, to use them in interesting parents in having defects corrected that are found by school inspectors, to educate them in problems of communicable disease, and the thousand and one things that make for child betterment.

The undertaking is a tremendously large one and is only possible because each of the great associations of civilians interested in child welfare problems as war measures have pooled their interests and welcomed the coördinating force of the department's division of child hygiene. We are fortunate, too, in having as the director of this movement a man of high standing in pediatrics, of wide acquaintance with the medical profession and for years actively engaged in both the work of the Child Welfare Department of the Committee of Public Safety of Pennsylvania and the Child Welfare Department of the Women's Committee of the Council of National Defense.

## CHILD CONSERVATION IN NEW JERSEY.

By R. B. FITZ-RANDOLPH,

*Assistant Director, New Jersey State Department of Health.*

CHILD conservation work in New Jersey, as in most other places, was first instituted by private agencies, such as Children's Welfare Associations, Visiting Nurses' Associations and Women's Leagues of various kinds. The interest aroused by the work of some of these organizations, together with the attention that has been directed toward the necessity for child conservation by various other agencies, has created a demand for municipal child hygiene work which has made it possible, in recent years, for some of our more progressive local boards of health to institute systematic child welfare measures, as a part of their regular work. Later the State Department of Health began to do some incidental educational work in connection with its propaganda against tuberculosis. In 1915 an appropriation made available by the legislature rendered possible the creation of a Division of Child Hygiene in the State Department, and this division began active operations on Feb-

ruary 1, 1916. At this time there were three other states with similar organizations, New Jersey being the fourth state to establish such a division. Up to the present time the funds available for the use of this division have been limited and the work which has been carried on has been largely investigational and educational. On July 1st, when the new fiscal year begins, an appropriation of \$25,000 will become available, which will enable the department to extend considerably the operations of the division. It will then be possible to maintain a sufficiently large force in this division not only to enable it to do a considerable amount of field work itself, but also to do much toward systematizing and correlating the work of local boards of health and of voluntary agencies throughout the state.

At the present time there are two cities in the state, Newark and Jersey City, in which the local health authorities have established well organized and equipped

Child Hygiene Bureaus. These two organizations are very similar and work along about the same lines. In Newark, for example, the chief of the bureau is a specialist in children's diseases, who devotes a large part of his time, although not all of it, to the work of the bureau. He has built up a loyal, well trained and hard working organization, consisting of fifteen or sixteen persons, twelve or thirteen of whom are nurses, each one of whom is assigned to a regular district. Every reported birth in the nurse's district is investigated by her, and she spends a certain portion of her time in consultation stations, of which there are four or more in the city. These consultation stations are conducted under the immediate supervision of a part-time medical officer, with nursing assistants, and are located in schools in various parts of the city. To these stations come expectant mothers for pre-natal care and advice, and mothers with their infants for the regular weighing, inspection, advice and assistance common to such stations. A very satisfactory working arrangement with various hospitals and clinics is in force, which enables sick children to be promptly referred to such institutions for treatment when necessary. Excellent records are kept, and a great deal of follow-up work is done by the nurses in the homes.

This work in Newark has now been going on for three or four years, and its results can plainly be shown. The infant mortality rate has been reduced to eighty-seven, which is a figure very considerably below that for adjoining municipalities and for the rest of the state.

In Jersey City a very similar organization, not quite so old, is working effectively along similar lines, and getting somewhat the same results. One or two other large cities in the state are planning to establish bureaus of this sort, but up to the present time this has not actually been done.

There are nine other municipalities in

this state which, although they do not have a regularly organized division of child hygiene, employ public health nurses, who spend all, or a large part of their time in child hygiene work. These municipalities are:

Atlantic City	Passaic
Linden	Perth Amboy
Montclair	Paterson
Orange	Hoboken
East Orange	

having a total estimated population of 501,698.

Visiting Nurses' Associations, maintained by private funds, employ nurses in seventeen cities and towns, having a total population of 970,803. These places are:

Atlantic City	The Oranges, including:
Bordentown	Orange
Elizabeth	South Orange
Lakewood	East Orange and
Moorestown	West Orange
Morristown	Plainfield
Newark	Riverton
New Brunswick	Trenton
Camden	Woodbury

In Trenton the Visiting Nurses' Association maintains a small organization definitely assigned to child hygiene work. In the other places the nurses do mostly bedside work, and the infant welfare work is relatively small in amount.

The Metropolitan Life Insurance Company employs eighteen nurses in this state, who do bedside nursing for patrons of the company, and incidentally some infant welfare work. In towns where there is a Visiting Nurses' Association this company usually pays this association at a per capita rate for doing this kind of work for it.

In Newark and Paterson, and in Bergen, Camden, Hudson, Middlesex and Somerset Counties, there are Anti-Tuberculosis Associations which do some infant welfare work in connection with tuberculosis pre-

vention. This covers a total population of 1,436,835.

Nurses are also employed by the Nurses' Associations of Clifton, Englewood and Orange, with a combined population of 46,234; by Civics Clubs in Bridgeton and Rahway, with a combined population of 24,786; by the Neighborhood Association of Milburn, with a population of 2,100; and by Children's Welfare Association of Hackensack, South Orange, Vineland, Hoboken and West Hoboken, with a total population of 108,733. In the last two named towns these organizations maintain child welfare stations.

The Sussex and Monmouth County branches of the State Charities Aid Society employ nurses who do some incidental child welfare work in these counties, which have a total population of 121,515.

There are a number of other organizations of various kinds in Summit, Bloomfield, Long Branch, Mount Holly, Haddonfield, Freehold, Boonton and Bound Brook, which do some child welfare work. In addition to these there are two Red Cross nurses attached to the Red Cross Sanitary Unit No. 24, working in the extra cantonment zone around Camp Dix, who do some child welfare work in connection with school inspection. These are also a considerable number of school nurses throughout the state, employed in most instances by boards of education, who do incidental child welfare work in connection with their regular duties in schools. There are about one hundred and thirty-five of these school nurses in the state, so distributed that only two counties, Cape May and Warren, have no school nurses.

Many of the nurses employed by the organizations named above are either not graduates or are not registered, and very few have had any adequate training along public health lines. The work of the nurses employed by boards of health is usually carefully supervised and kept

within proper limits, and is therefore effective. The work of many of the nurses employed by volunteer organizations is either not supervised at all or is directed by persons not versed in the principles underlying the operations of a public health nurse, and much of it, from a health standpoint, is therefore ineffective. With the exception of Newark and Jersey City, where the child hygiene work is organized on a satisfactory basis, most of the cities of the state are not doing work which can be regarded as satisfactory, although there are some individual nurses doing splendid educational work. Even in Newark and Jersey City, where the work is best organized, lack of sufficient funds makes it impossible to do intensive work throughout the entire city.

Mention should be made, also, of the number of large industrial plants in the state employing in the aggregate many thousands of employees, which maintain regularly employed industrial nurses who do follow-up work at the homes of the employees, part of which is child hygiene work. There are eighteen concerns known to the department which regularly employ such nurses, and it is altogether probable that there are a number of others of which we have not yet heard.

It would seem from the foregoing that there are a good many people in the state engaged in the child welfare work. It should be remembered, however, that most of these persons are engaged primarily in other duties and the child welfare work which they do is incidental. Much of it is ineffective; some of it is absolutely harmful. All of the various organizations which have any connection with child welfare work have been mentioned for the sake of completeness, but the actual amount of good work which is being done is not great.

The work of the State Department of Health which was begun in February, 1916, has been for the most part educational in character. A Child Hygiene Exhibit, con-



sisting of a considerable number of illustrated panels, with suitable photographs, paintings and legends, together with a good equipment of moving picture films and lantern slides, and the necessary machinery to use them, was put on the road May 1, 1917. It was found necessary to call it in during all of last summer, and it was out of service during large parts of January, February and March, because of conditions brought about by coal shortage in the severe weather, which made it impracticable to secure places in which it could be shown. Altogether, during the last year, from May 1, 1917 to May 1, 1918, the exhibit has been shown in eighteen different cities and towns, in the northern part of the state, and has been on view altogether ninety-four days, having a total attendance of 63,085 at 183 lectures, which were given by members of the staff of the bureau, and by physicians, health officers and other persons in the various cities and towns where the exhibit has been shown. The staff at present employed consists of the chief of the division; a supervising nurse; an advance agent for the exhibit, who devotes much of his time to making preliminary arrangements for its display, organizing committees, getting up programs, and attending to the preliminary work, which is considerable; a mechanic, who attends to the actual transportation and setting up of the exhibit, and who operates the moving picture machine and lantern; and a clerk. The supervising nurse delivers some lectures at the exhibit but her principal duty consists in visiting the various associations and organizations, both public and private, which conduct infant welfare work throughout the state, gathering information regarding their activities, helping those who need it, and doing what she can to bring about some sort of order and system in a line of endeavor in which at present there is a tremendous amount of wasted energy and misdirected

effort. This is slow work, and of course, we cannot hope to cover the state effectually with one person. With the coming year, however, the increase in our appropriation will enable us to materially increase the staff of this division.

Plans for the coming year have not been definitely made. The war has very materially increased the need for infant welfare work in New Jersey, because the industrial boom has taken into the mills and factories thousands of married women with children. It has also made it exceedingly difficult for us to secure suitable persons to carry on this work. Nurses with brains and with public health training are almost impossible to find. Nearly all the good ones, who in normal times might have been available for this work, have gone into the service of the Government or of the Red Cross, or have abandoned the profession of nursing to take up some easier and more lucrative occupation. It is even more difficult to get physicians, even on a part-time basis, to do this kind of work at the present time, as a large proportion of the younger and more progressive element in the profession have either already gone into the Army or Navy, or are now planning to do so. It is somewhat difficult, therefore, to plan any line of activity with any assurance that the personnel can be secured to carry it out. There is no doubt that the educational work along the lines of the present exhibit will be continued and perhaps extended somewhat. It is also proposed to put actual demonstration parties in the field, the plan being to provide one or more mobile units which will go into a town, get in touch with the local authorities and local civic, charitable, and religious organizations which may be interested, and carry on, for some little time, intensive child welfare work, such as we believe should be carried on by local boards of health. These mobile units will naturally go to the larger cities first, although there is a crying

need for child welfare work in the rural sections of the state. At the present time absolutely nothing is done in most of the rural communities. Living conditions in the country are often worse than in the city, and proper facilities for the care of expectant mothers, and for the intelligent management of infants and young children do not exist at all. The rural problem is going to be exceedingly troublesome, inasmuch as we cannot hope to depend upon any active assistance, either financial or otherwise, from the local health authorities, and to carry on this work adequately by state funds will require large additional appropriations, which will be difficult to get.

The above statement is only the barest outline of conditions as they now exist in the state. Plans for future work have not yet been definitely made. Conditions brought about by the war may render necessary profound modifications of any scheme which can now be devised. There is no doubt, however, that our legislature has awakened to the necessity of child welfare work, and the State Department of Health is anxious to get that work under way along sane and reasonable lines; lines which may soon be expected to show results in the reduction of the infantile death rate.

**THE PRESIDENT:** Before passing on to the reports of the Committees it seems to me that it would be fitting for a member of the Conference to make a motion to extend a vote of thanks to the Commissioners of the District of Columbia for the use of this chamber.

It was accordingly voted that the Conference extend to the Commissioners of the District of Columbia its thanks for the courtesy of permitting the use of the chamber in the District Building during the Conference.

It was further voted that a vote of thanks be extended to the President of the Conference for the way in which he has presided over the Conference and for the excellent program which he and the Secretary have prepared and carried through.

## REPORT OF THE AUDITING COMMITTEE.

PRESENTED BY DR. J. T. BLACK, *Chairman.*

TO THE CONFERENCE OF STATE AND PROVINCIAL BOARDS OF HEALTH:

Your Auditing Committee has the honor to make the following report and recommendations:

1. The accounts of your Treasurer as submitted have been examined and found correct.
2. Apparently your last Auditing Committee failed to endorse the Treasurer's account for 1917, or to certify to a balance.
3. The Treasurer has turned in \$70, the source of which is not indicated other than "assessments."

The account as approved by your Committee is summarized as follows:

May 1, 1917

Balance (not verified) . . . . . \$443.96

### Receipts

Assessments (not itemized) . . . . .	\$70
1917 Assessments . . . . .	400
1918 Assessments (Hawaii) . . . . .	10
	<hr/> 480.00
	<hr/> \$923.96

Expenditures . . . . . 440.73

April 30, 1918

Balance cash on hand (Federal Trust Co., Boston) . . . . .	\$483.23
--	----------

### Appendix.

Unpaid	1916	1917	1918
Assessments			
April 1, 1918 . . . . .	11	18	57
Paid assessments . . . . .	47	50	1
	<hr/>	<hr/>	<hr/>
Membership . . . . .	53	58	58

JOHN T. BLACK,  
*Chairman.*

## REPORT OF THE COMMITTEE ON NOMINATIONS.

Your Committee on Nominations begs to report:

For President: Dr. W. S. Rankin, North Carolina.

For Vice-President: Dr. W. F. Cogswell, Montana.

For the Executive Committee: Dr. J. S. B. Pratt, Hawaii, Chairman, Dr. L. D. Bristol, Maine, Mr. H. A. Whittaker, Minnesota.

DR. LEATHERS, *Mississippi*: Dr. Tuttle of Washington, chairman of this Committee, transmitted this report to me with the request that I present it for him. The Committee met last night and talked the matter over very carefully and we endeavored to select as officers members who have been coming here for a number of years.

It was moved and seconded that the report of the Committee on Nominations be accepted and that the Secretary be empowered to cast one ballot for the officers nominated. One ballot was then cast for the officers nominated and they were accordingly declared elected as the officers of the Conference.

THE RETIRING PRESIDENT: In retiring from this office I wish to thank you all for what might be called your vote of confidence in me which you have just passed, and for your support and loyalty during the Conference. In regard to the Conference there is only one regret that I have and that is that we could not have held together for the full two days allotted to the Conference, even if it was rather strenuous work. I may be rather selfish in that stand, but it seems to me that when a large number of us come from a pretty long distance, it would be a little more encouraging to us if those who are nearer could stay a little longer, so that we could have a full membership during the entire Conference. If the Conference program cannot be conveniently covered in two days, it seems to me that we could very well, in a time of stress like this, devote three days to a discussion and exchange of opinions. This is not said in a

spirit of criticism, but simply as a matter of regret that we could not have stayed together for the full time.

I am very glad to welcome Dr. Rankin as President of the Conference for the coming year and present to him the badge of office.

DR. RANKIN, *President-Elect*: About the only thing one can say on occasions like this is that I appreciate what you have done and your confidence. I hope most of you know me well enough to be able to interpret my feelings without my trying to express them. With the help of the efficient and splendid Secretary whom we elected last year and whom we are going to retain this year, I do not hesitate to promise the Conference to try to keep it alive during the year and present a program for next year that will justify a full attendance. I appreciate very much the election as your President.

## REPORT OF THE COMMITTEE ON RESOLUTIONS INCLUDING NECROLOGY.

Your Committee begs to present the following resolutions, with the recommendation that they be adopted by this Conference:

RESOLUTION ON THE DEATH OF DR. SAMUEL G. DIXON, FORMER COMMISSIONER OF HEALTH OF PENNSYLVANIA.

WHEREAS, Dr. Samuel G. Dixon, Commissioner of Health of Pennsylvania, for many years a member of this Conference, has been called by death, and

WHEREAS, Dr. Dixon was not only an esteemed member of this Conference, but also a most valuable man to the public health work of his state and nation, and

WHEREAS, The cause of public health has lost one of its pioneers in the large field of state public health organization and development, be it

*Resolved*, That the Conference of State and Provincial Health Authorities in session assembled does hereby express its loss to the public health cause in the death of Dr. Dixon, and extends its sympathy to the members of his family, and be it further

*Resolved*, That a copy of these resolutions be spread on the records of this Conference, and the Secretary of the Conference instructed to send a copy to Dr. Dixon's family.

**RESOLUTION ON THE DEATH OF DR. IRVING A. WATSON, FORMER SECRETARY OF THE STATE BOARD OF HEALTH OF NEW HAMPSHIRE.**

WHEREAS, Dr. Irving A. Watson, Secretary of the State Board of Health of New Hampshire, and for many years an active member of this Conference, has been called by death, and

WHEREAS, Dr. Watson by his genial manner and energetic work in the Conference had endeared himself to its members, and

WHEREAS, The cause of public health has lost one of its earnest and enthusiastic workers, be it

*Resolved*, That the Conference of State and Provincial Health Authorities in session assembled expresses its loss in the death of Dr. Watson, and extends its sympathy to the members of his family, and be it further

*Resolved*, That a copy of these resolutions be spread upon the records of the Conference, and the Secretary of the Conference be instructed to send a copy to Dr. Watson's family.

**RESOLUTION RELATIVE TO THE TRANSPORTATION OF DISCHARGED TUBERCULAR SOLDIERS.**

WHEREAS, in the discharge of men from the army for tuberculosis, it is the practice to furnish them with cash for their transportation to their home state, and

WHEREAS, this results in many cases, in the soldiers spending their money instead of purchasing tickets home, and thus finding themselves penniless among strangers, and a charge upon the state, and

WHEREAS, great hardship to the individual and unjust responsibility to the state results now therefore be it

*Resolved*, That the Conference of State and Provincial Health Authorities, respectfully urges the War Department to issue to such discharged soldiers railway tickets to their homes, instead of cash.

**RESOLUTION RELATIVE TO SECURING MORE COMPLETE RECORDS OF DEATHS.**

WHEREAS, each state is entitled to a complete record of the deaths of its citizens, and

WHEREAS, transcripts of deaths are not sent to the Census Bureau by all states, and

WHEREAS, the War Department is not in position to furnish each state with such records, and therefore be it

*Resolved*, That the state registrars of the several states and territories be requested to forward an authorized copy of all certificates for soldier deaths to the registrar of the state of which such soldier was a resident.

**RESOLUTIONS RELATIVE TO THE DISSEMINATION OF INFORMATION RELATIVE TO THE VENEREAL DISEASES.**

WHEREAS, venereal diseases, according to the statement of the Surgeon General of the army,

constitute the greatest cause of disability in the army, and

WHEREAS, these diseases result in decreased efficiency in the nation's industrial life, and

WHEREAS, the experience of the first year of the war has clearly shown that venereal diseases in the army and navy are due almost entirely to conditions in civil life, and

WHEREAS, venereal diseases in civil life are due largely to ignorance and misinformation and the widespread belief among men that gonorrhea is no worse than a bad cold and that sexual activity is necessary to health, and

WHEREAS, much misinformation has been disseminated by means of advertisement of venereal disease nostrums posted in public lavatories, and

WHEREAS, venereal disease placards have been found effective in educational propaganda in various states, be it

*Resolved*, That the Director General of the Railroads of the United States and the Surgeon General of the Public Health Service be urged to coöperate in posting in men's lavatories in all the day coaches and pullman cars operating in the United States, and in men's lavatories in all of the railroad stations of the United States, a venereal disease placard which shall include an enumeration of the effects of gonorrhea and syphilis; a warning against quack doctors and venereal disease nostrums; a statement to the effect that continence is compatible with health; and an offer to supply pamphlets of information upon request; and where practicable a notice stating where treatment may be secured in local dispensaries, be it further

*Resolved*, That a committee of three be appointed to present these resolutions to the Director General of the Railroads of the United States and to the Surgeon General of the Public Health Service, and to urge upon them the importance of bringing about the posting of these placards immediately as a war measure.

**RESOLUTIONS RELATIVE TO THE KAHN-CHAMBERLAIN BILL, PROVIDING FOR AN APPROPRIATION FOR THE CONTROL OF VENEREAL DISEASES.**

WHEREAS, venereal diseases, according to the statement of the Surgeon General of the army, constitute the greatest cause of disability in the army, and

WHEREAS, these diseases result in decreased efficiency in the nation's industrial life, and

WHEREAS, the experience of the first year of the war has clearly shown that venereal diseases in the army and navy are due almost entirely to conditions in civil life, and

WHEREAS, in response to the appeal of the War Department, state boards of health have undertaken vigorous campaigns against venereal diseases, and

WHEREAS, the inadequacy of peace-time facilities and a lack of money have prevented

the states from the most effective coöperation with the government, and

WHEREAS, an emergency exists and the need for immediate action is imperative, be it

*Resolved*, That the Conference of State and Provincial Health Authorities hereby urges the Congress of the United States to bring about the passage of the bill "To protect the military and naval forces of the United States against venereal diseases, and for other purposes" (known as S. 4608 and H. R. 13258) at the earliest possible moment, in order that funds may be available July 1st to aid the states in their campaigns against venereal diseases, and be it further

*Resolved*, That the President of the Conference of State and Provincial Health Authorities appoint a committee of three to present these resolutions to the House and Senate Chairmen of the Committee on Military Affairs, to which the bill has been referred.

## REPORT OF THE COMMITTEE ON PUBLICITY.

PRESENTED BY DR. W. C. WOODWARD,  
*District of Columbia, Chairman.*

Your Committee regrets that it has been unable to obtain more publicity. Because abstracts of papers were not presented and because there is so much inter-

est in the war, matters pertaining to life and health do not at present appeal to the public.

It was voted that the reports of the Committees on Resolutions and Publicity and the report of the Auditing Committee be accepted and placed on file and the Committees discharged.

DR. HAYNE, *South Carolina*: What was the action taken with regard to the invitation from the Hon. Mr. McPherson to have the Conference meet in Toronto next year?

THE SECRETARY: There was no action taken. That can be acted upon later in consultation with the Executive Committee and the Surgeon General of the Public Health Service.

THE PRESIDENT-ELECT: In accordance with the vote taken by the Conference I appoint the following Committee to present the resolutions adopted relative to the Kahn-Chamberlain bill to the House and Senate Chairman of the Military Affairs Committee of Congress:

Dr. Hayne, Chairman, Dr. Kellogg, Dr. Batt, Dr. Rankin, *ex-officio*.

There being no further business before it, the Conference was adjourned.

## OFFICERS OF THE CONFERENCE, 1919.

<i>President</i> . . . . .	DR. W. S. RANKIN, North Carolina
<i>Vice-President</i> . . . . .	DR. W. F. COGSWELL, Montana
<i>Secretary-Treasurer</i> . . . . .	DR. E. R. KELLEY, Massachusetts

## EXECUTIVE COMMITTEE.

DR. J. S. B. PRATT, Hawaii, Chairman  
 DR. LEVERETT DALE BRISTOL, Maine  
 MR. H. A. WHITTAKER, Minnesota.

## COMMITTEES, 1919.

*Activities in Public Health Matters by Federal Departments other than the United States Public Health Service.*—Dr. S. J. Crumbine, Chairman; Dr. T. D. Tuttle, Dr. W. S. Leathers, Dr. J. W. Kerr, United States Public Health Service, Consulting Member.

*Cerebro-Spinal Meningitis.*—Dr. Matthias Nicoll, Jr., Chairman.

*Extension of Federal Assistance in Rural Sanitation to the Several States.*—Dr. W. S. Rankin, Chairman; Dr. S. J. Crumbine, Dr. W. F. Cogswell.

*International Border Health Problems.*—Dr. Leverett D. Bristol, Chairman; Dr. John W. S. McCullough, Dr. Henry Esson Young.

*Committee on Pellagra.*—Dr. James A. Hayne, Chairman; Dr. H. F. Harris, Dr. Joseph Goldberger, United States Public Health Service, Consulting Member.

*Committee on Pneumonia.*—Dr. John S. Hitchcock, Chairman; Dr. B. F. Royer, Dr. A. B. Wadsworth, Dr. Rufus I. Cole, Advisory Member.

*Committee on Progress of Full Time District Health Officer Legislation.*—Dr. C. St. Clair Drake, Chairman; Dr. J. T. Black, Dr. J. S. Fulton, Dr. E. R. Kennedy, Dr. W. S. Leathers, Dr. H. E. Young.

*Committee on Recent Advances in Sanitary Laws, Organization and Practice.*—Mr. H. A. Whittaker, Chairman; Dr. J. N. Hurty, Dr. E. G. Williams, Dr. Carroll Fox, United States Public Health Service, Consulting Member.

*Committee on Tuberculosis Policy.*—Dr. H. M. Bracken, Chairman; Dr. J. T. Black, Dr. A. T. McCormack, Dr. F. C. Smith, United States Public Health Service, Consulting Member.

## SECRETARIES OR EXECUTIVE OFFICERS, STATE, TERRITORIAL AND PROVINCIAL BOARDS AND DEPARTMENTS OF HEALTH OF CANADA AND UNITED STATES.

## CANADA.

ONTARIO.—Dr. F. Montizambert, Director-General of Public Health, Ottawa.

## PROVINCES.

ALBERTA.—Dr. T. J. Norman, Provincial Medical Officer of Health, Edmonton.

BRITISH COLUMBIA.—Dr. Henry Esson Young, Secretary of the Provincial Board of Health, Victoria.

MANITOBA.—Dr. M. Stewart Fraser, Executive Officer of the Provincial Board of Health, Winnipeg.

NEW BRUNSWICK.—Dr. Roy H. McGrath, Secretary of the Provincial Board of Health, Fredericton.

NOVA SCOTIA.—Dr. W. H. Hattie, Provincial Health Officer, Halifax.

ONTARIO.—Dr. John W. S. McCullough, Chief Officer of Health, Toronto.

QUEBEC.—Dr. Elzear Pelletier, Secretary, Montreal.

SASKATCHEWAN.—Dr. M. M. Seymour, Commissioner of Public Health, Regina.

## UNITED STATES.

Dr. Rupert Blue, Surgeon General, United States Public Health Service, Washington, D. C.

## STATES AND TERRITORIES.

ALABAMA.—Dr. Samuel W. Welch, State Health Officer, Montgomery.

ALASKA.—Hon. Thomas Riggs, Jr., Governor and Territorial Commissioner of Health (ex officio) Juneau.

ARIZONA.—Dr. Orville Harry Brown, Secretary and Superintendent of Public Health, Phoenix.

ARKANSAS.—Dr. C. W. Garrison, State Health Officer, Little Rock.

CALIFORNIA.—Dr. Wilfred H. Kellogg, Secretary, Sacramento.

CANAL ZONE.—Dr. A. T. McCormack, U. S. A., Balboa Heights.

COLORADO.—Dr. Erlo E. Kennedy, Secretary, Denver.

CONNECTICUT.—Dr. John T. Black, State Commissioner of Health, Hartford.

DELAWARE.—Mr. C. H. Wells, State Health Commissioner, Wilmington.

DISTRICT OF COLUMBIA.—Dr. William C. Fowler, Health Officer, Washington.

FLORIDA.—Dr. W. H. Cox, State Health Officer, Jacksonville.

GEORGIA.—Dr. J. F. Abercrombie, Secretary, Atlanta.

HAWAII.—Dr. J. S. B. Pratt, President, Territorial Board of Health, Honolulu.

IDAHO.—Dr. Edward T. Biwer, Secretary, Boise.

ILLINOIS.—Dr. C. St. Clair Drake, State Director of Health, Springfield.

INDIANA.—Dr. J. N. Hurty, State Commissioner of Health, Indianapolis.

IOWA.—Dr. Guilford Sumner, Secretary, Des Moines.

KANSAS.—Dr. S. J. Crumbine, Secretary, Topeka.

KENTUCKY.—Dr. G. N. McCormack, Acting Secretary, Bowling Green.

LOUISIANA.—Dr. Oscar Dowling, President, New Orleans.

MAINE.—Dr. Leverett D. Bristol, State Commissioner of Health, Augusta.

MARYLAND.—Dr. John S. Fulton, Secretary, Baltimore.

MASSACHUSETTS.—Dr. Eugene R. Kelley, State Commissioner of Health, Boston.

MICHIGAN.—Dr. R. M. Olin, Secretary, Lansing.

MINNESOTA.—Dr. H. M. Bracken, Secretary and Executive Officer, St. Paul.

MISSISSIPPI.—Dr. W. S. Leathers, Secretary, Jackson.

MISSOURI.—Dr. George H. Jones, Secretary, Jefferson City.

MONTANA.—Dr. W. F. Cogswell, Secretary, Helena.

NEBRASKA.—Dr. William T. Wild, Commissioner of Health, Lincoln.

NEVADA.—Dr. S. L. Lee, Secretary, Carson.

NEW HAMPSHIRE.—Dr. Charles Duncan, Secretary, Concord.

NEW JERSEY.—Dr. J. C. Price, Director, Trenton.

NEW MEXICO.—Dr. R. K. McClanahan, Secretary, East Las Vegas.

NEW YORK.—Dr. Hermann M. Biggs, Commissioner of Health, Albany.

NORTH CAROLINA.—Dr. W. S. Rankin, Secretary, Raleigh.

NORTH DAKOTA.—Dr. C. J. McGurran, Secretary, Devil's Lake.

OHIO.—Dr. Allan Freeman, Commissioner of Health, Columbus.

OKLAHOMA.—Dr. John W. Duke, Commissioner of Health, Guthrie.

OREGON.—Dr. Robert E. L. Holt, Secretary and State Health Officer, Portland.

PENNSYLVANIA.—Dr. B. F. Royer, Acting Commissioner of Health, Harrisburg.

PHILIPPINE ISLANDS.—Dr. J. D. Long, Director of Insular Bureau of Health, Manila.

PORTO RICO.—Dr. W. F. Lippitt, Territorial Commissioner of Health, San Juan.

RHODE ISLAND.—Dr. Byron U. Richards, Secretary, Providence.

SOUTH CAROLINA.—Dr. James A. Hayne, State Health Officer, Columbia.

SOUTH DAKOTA.—Dr. P. B. Jenkins, Secretary, Waubay.

TENNESSEE.—Dr. Olin West, Secretary, Nashville.

TEXAS.—Dr. W. B. Collins, President, Austin.

UTAH.—Dr. T. B. Beatty, State Commissioner of Health, Salt Lake City.

VERMONT.—Dr. Charles F. Dalton, Secretary, Burlington.

VIRGINIA.—Dr. E. G. Williams, State Commissioner of Health, Richmond.

WASHINGTON.—Dr. T. D. Tuttle, State Commissioner of Health, Seattle.

WEST VIRGINIA.—Dr. S. L. Jepson, State Commissioner of Health, Charleston.

WISCONSIN.—Dr. C. A. Harper, Secretary, Madison.

WYOMING.—Dr. C. Y. Beard, Secretary, Cheyenne.



# INDEX

	PAGE
Activities in Public Health Matters by Federal Departments other than the U. S. Public Health Service, Committee on.....	105, 136
Activities of American Red Cross for Child Conservation— <i>Taliaferro Clark, Surgeon, U. S. Public Health Service</i> .....	114
Auditing Committee.....	12, 132
Batt, Dr. W. R.: Member, committee to present resolutions re Kahn-Chamberlain bill.....	135
Beard, Miss Mary, R. N.....	119
Beatty, Dr. T. B.: Discusses committee report on Recent Advances in Sanitary Laws, Organization and Practice.....	42
Determination of type in pneumonia.....	54
Terminal disinfection.....	45, 47
Tuberculosis.....	70
Black, Dr. John T.: Chairman, Auditing Committee.....	12, 132
Member, Committee on Progress of Full-Time District Health Officer Legislation.....	136
Member, Committee on Tuberculosis.....	136
Bracken, Dr. H. M.: Chairman, Committee on Tuberculosis Policy.....	136
Discusses Kahn-Chamberlain bill.....	11, 12
Terminal disinfection.....	45
Tuberculosis.....	68
Venereal disease.....	104
Reporting for Committee on Tuberculosis Policy.....	59
Bristol, Dr. Leverett D.: Chairman, Committee on International Border Health Problems.....	136
Discusses committee report on Recent Advances in Sanitary Laws, Organization and Practice.....	41
Elected member of Executive Committee.....	133
Brownlow, Hon. Louis A.....	3
Cerebro-spinal Meningitis, Committee on.....	58, 136
Change in Name of Conference, Committee on.....	55, 78
Child Conservation.....	114
Activities of American Red Cross for.....	114
Child Conservation in Illinois.....	124
Child Conservation in New Jersey.....	128
Child Conservation in Pennsylvania.....	127
Work of Massachusetts State Department of Health and Women's Committee of the Council of National Defense on Child Conservation.....	119
Clark, Dr. Taliaferro, U. S. Public Health Service—Activities of American Red Cross for Child Conservation.....	114
Cogswell, Dr. W. F.: Discusses sanitary policy under war conditions.....	113
Elected Vice-President for 1919.....	133
Member, Auditing Committee.....	12

Cole, Dr. Rufus:	PAGE
Advisory member, Committee on Pneumonia	136
Discusses committee report on pneumonia	53, 54
Terminal disinfection	46
Pneumonia in the Army	48
Committees:	
Appointment of certain	12
Auditing Committee	12, 132
on Activities in Public Health Matters by Federal Departments other than the U. S. Public Health Service	105, 136
on Cerebro-spinal Meningitis	58, 136
on Change in Name of Conference	55, 78
on Conservation of Vision	12
on Extension of Federal Assistance in Rural Sanitation to the Several States	105, 136
on International Border Health Problems	42, 136
on Nominations	12, 133
on Pellagra	43, 136
on Pneumonia	52, 136
on Progress of Full-Time District Health Officer Legislation	78, 136
on Resolutions	12, 133
on Sanitary Policy under War Conditions	43, 73, 105
on Terminal Disinfection	44
on Tuberculosis Policy	59, 70, 136
Conference of State and Provincial Boards of Health:	
Name changed	55, 78
Officers, 1919	136
Place of meeting next year	104, 135
Crumbine, Dr. S. J.:	
Chairman, Committee on Activities in Public Health Matters by Federal Departments other than the U. S. Public Health Service	136
Dalton, Dr. C. F.:	
Discusses anti-pneumococcal serum	54
Committee report on Sanitary Policy under War Conditions	109
Member, Committee on Resolutions	12
Reporting for Committee on Terminal Disinfection	44
Davis, Dr. W. A.:	
Death returns	77
Discusses committee report on Sanitary Policy under War Conditions	113
Discusses tuberculosis	70
Death returns	77
Diagnosis of Meningitis as a Public Health Problem— <i>Dr. Mathias Nicoll, Jr.</i>	56
District Health Officer, Progress of Legislation for, Committee on	78, 136
Drake, Dr. C. St. Clair:	
Chairman, Committee on Full-Time District Health Officer Legislation	136
Chairman, Committee on Resolutions	12
Child Conservation in Illinois	124
Discusses full-time district health officers	87
Kahn-Chamberlain bill	102, 103
Sanitary Policy under War Conditions	111, 114
Reporting for Committee on Progress of Full-Time District Health Officer Legislation	78
Executive Committee, 1919	136

	PAGE
Executive Officers or Secretaries of State, Provincial and Territorial Boards and Departments of Health of Canada and the United States. . . . .	136
"Fit to Fight," invitation to see extended by War Department. . . . .	55
Fitz Randolph, R. B.: . . . . .	
Child Conservation in New Jersey. . . . .	128
Fox, Dr. Carroll: . . . . .	
Advisory member, Committee on Recent Advances in Sanitary Laws, Organization and Practice. . . . .	136
Frantz, Dr. A. E.: . . . . .	
Discusses conservation of vision. . . . .	18
Full-time district health officer legislation. . . . .	87
Pellagra. . . . .	44
Terminal disinfection. . . . .	45
Fulton, Dr. J. S.: . . . . .	
Member, Committee on Progress of Full-Time District Health Officer Legislation. . . . .	137
Goldberger, Dr. Joseph, U. S. Public Health Service: . . . . .	
Consulting member, Committee on Pellagra. . . . .	136
Guests present. . . . .	5
Gwynn, Dr. G. H.: . . . . .	
Discusses report of Committee on Sanitary Policy under War Conditions. . . . .	109
Harper, Dr. C. A.: . . . . .	
Discusses conservation of vision. . . . .	18
Full-time district health officer legislation. . . . .	88
Member, Committee on Resolutions. . . . .	12
Harris, Dr. H. F.: . . . . .	
Member, Committee on Pellagra. . . . .	136
Hatfield, Dr. C. J.: . . . . .	
The War Program of the National Tuberculosis Association. . . . .	71
Hayne, Dr. James A.: . . . . .	
Chairman, Committee on Pellagra. . . . .	136
Discusses committee report on pellagra. . . . .	43
Kahn-Chamberlain bill. . . . .	11
Terminal disinfection. . . . .	45
Member, committee to present resolutions re Kahn-Chamberlain bill. . . . .	135
Reporting for Committee on Sanitary Policy under War Conditions. . . . .	43, 73, 105, 114
Hickey, Dr. Charles: . . . . .	
Discusses recent advances in sanitary laws. . . . .	41
Cost of anti-pneumococcic serum. . . . .	54, 55
Sanitary policy under war conditions. . . . .	111
Tuberculosis. . . . .	68
Hitchcock, Dr. John S.: . . . . .	
Chairman, Committee on Pneumonia. . . . .	136
Discusses report of Committee on Full-time District Health Officer Legislation. . . . .	88
Reporting for Committee on Pneumonia. . . . .	52
Hoffman, Mr. Frederick: . . . . .	
Discusses sanitary policy under war conditions. . . . .	74
Hurty, Dr. J. N.: . . . . .	
Member, Committee on Recent Advances in Sanitary Laws, Organization and Practice. . . . .	136
Illinois, Child Conservation in. . . . .	124
International Border Health Problems, Committee on. . . . .	42, 136

	PAGE
Irvine, Dr. H. G.:	
Description of Practical Organization and Carrying out of an Efficient State Department of Health Program against Venereal Disease.....	96
Discusses venereal disease bills.....	104
Jepson, Dr. S. J.:	
Discusses sanitary policy under war conditions.....	114
Member, Committee on Resolutions.....	12
Kahn-Chamberlain bill.....	11, 102, 133
Kelley, Dr. Eugene R.:	
Accepts gift of gavel from President on behalf of Conference.....	11
Discusses Kahn-Chamberlain bill.....	11
Reporting as Secretary-Treasurer.....	9
Kellogg, Dr. W. H.:	
Discusses conservation of vision.....	18
Full-time district health officers.....	87
Terminal disinfection.....	45
Tuberculosis.....	70
Member, committee to present resolutions re Kahn-Chamberlain bill.....	135
Kennedy, Dr. E. R.:	
Member, Committee on Progress of Full-Time District Health Officer Legislation.....	136
Kerr, Dr. J. W., U. S. Public Health Service:	
Consulting member, Committee on Activities in Public Health Matters by Federal Departments other than the United States Public Health Service.....	136
Klebs, Dr. Arnold C.:	
The Policy of Public Health Authorities in the Problem of Tuberculosis.....	61
Discusses tuberculosis.....	70
Leathers, Dr. W. S.:	
Discusses sanitary policy under war conditions.....	109
Member, Committee on Activities in Public Health Matters by Federal Departments other than the U. S. Public Health Service.....	136
Member, Committee on Resolutions.....	12
Reporting for Committee on Nominations.....	133
Lumsden, Dr. L. L., U. S. Public Health Service:	
Discusses sanitary policy under war conditions.....	112
Massachusetts State Department of Health and Women's Committee of the Council of National Defense, Work on Child Conservation— <i>Mary Beard, R. N.</i> .....	119
McCormack, Dr. A. T.:	
Member, Committee on Tuberculosis Policy.....	136
McCullough, Dr. J. W. S.:	
Discusses diagnosis of spinal meningitis.....	58
Sanitary policy under war conditions.....	76
Tuberculosis.....	69
Member, Committee on International Border Health Problems.....	136
McLaughlin, Allan J., Assistant Surgeon-General, U. S. Public Health Service:	
Discusses sanitary policy under war conditions.....	113
Venereal disease.....	104
Program of the U. S. Public Health Service against Venereal Disease.....	93
McMullen, Dr. John, U. S. Public Health Service:	
Discusses conservation of vision.....	17
Member, Committee on Conservation of Vision.....	136
McPherson, Hon. W. D. ....	76, 104

	PAGE
Meningitis as a Public Health Problem, The Diagnosis of— <i>Dr. Mathias Nicoll, Jr.</i> .....	56
Miller venereal disease bill.....	104
Nicoll, Dr. Mathias Jr.:	
Chairman, Committee on Cerebro-spinal Meningitis.....	136
Discusses Kahn-Chamberlain bill.....	12
Distribution of anti-pneumococcic serum.....	54
Terminal disinfection.....	45
Tuberculosis.....	69, 70
The Diagnosis of Meningitis as a Public Health Problem.....	56
National Tuberculosis Association, War Program of.....	71
New Jersey, Child Conservation in.....	128
Nominations, Committee on.....	12, 133
Officers of Conference, 1919.....	133, 136
Olin, Dr. Richard M.:	
Discusses sanitary policy under war conditions.....	110
Palmer, Dr. George J.:	
Discusses tuberculosis.....	69
Pellagra, Committee on.....	43, 136
Pennsylvania, Child Conservation in.....	127
Pneumonia, Committee on.....	52, 136
Pneumonia in the Army— <i>Dr. Rufus Cole</i> .....	48
Pratt, Dr. J. S. B.:	
Address.....	7
Elected chairman of Executive Committee.....	133
Presents gavel.....	11
President's Address— <i>Dr. J. S. B. Pratt</i> .....	7
Program of Conference sessions.....	5
Publicity, Committee on.....	135
Rankin, Dr. W. S.:	
Discusses sanitary policy under war conditions.....	75, 108, 110
Tuberculosis.....	70
Elected President.....	133
Member, committee to present resolutions on Kahn-Chamberlain bill.....	135
Reporting for Committee on Change in Name of Conference.....	55
Reporting for Committee on Extension of Federal Assistance in Rural Sanitation to the Several States.....	105, 136
Recent Advances in Sanitary Laws Organization and Practice, Committee on.....	18, 136
Red Cross, American, Activities for Child Conservation of.....	114
Resolutions:	
For coördinating state boards and departments of health with the office of the Surgeon-General of the U. S. Army.....	73, 107
on death returns.....	78, 134
on death of Dr. Samuel G. Dixon.....	133
on death of Dr. Irving A. Watson.....	134
on Kahn-Chamberlain bill.....	103, 134
on transportation of discharged tuberculous soldiers.....	134
on venereal disease.....	103, 134
Resolutions, Committee on.....	12, 133

	PAGE
Roll-calls	
of States and Provinces. . . . .	4
on resolutions for coördinating state boards and departments of health with the office of the Surgeon-General of the U. S. Army. . . . .	114
Royer, Dr. B. F.:	
Child Conservation in Pennsylvania. . . . .	127
Discusses sanitary policy under war conditions. . . . .	111
Terminal disinfection. . . . .	46
Tuberculosis. . . . .	70
Member, Committee on Pneumonia. . . . .	136
Rural Sanitation, Extension of Federal Assistance to the Several States in, Committee on. . . . .	105, 136
Sanitary Laws, Organization and Practice, Committee on Recent Advances in. . . . .	18, 136
Sanitary Policy under War Conditions, Committee on. . . . .	43, 73, 105
Sawyer, Major W. A.:	
Program of the War Department against Venereal Disease. . . . .	89
Secretaries or Executive Officers of State, Territorial and Provincial Boards and Departments of	
Health of Canada and the United States. . . . .	136
Secretary-Treasurer, Report of. . . . .	9
Seymour, Dr. M. M.:	
Reporting for Committee on Conservation of Vision. . . . .	12
Smith, Dr. C. E.:	
Discusses terminal disinfection. . . . .	45
Smith, Dr. F. C.; U. S. Public Health Service:	
Consulting member, Committee on Tuberculosis Policy. . . . .	136
Snow, Lieut.-Col. Wm. F.:	
Program of the War Department against Venereal Disease. . . . .	89
Sumner, Dr. G. H.:	
Discusses terminal disinfection. . . . .	46
Terminal Disinfection, Committee on. . . . .	44
Tuberculosis Policy, Committee on. . . . .	59, 70, 136
Tuberculosis, Policy of Public Health Authorities in the Problems of— <i>Dr. Arnold C. Klebs</i> . . . . .	61
Tuttle, Dr. T. D.:	
Chairman, Committee on Nominations. . . . .	12
Discusses sanitary policy under war conditions. . . . .	109
Terminal disinfection. . . . .	47
Makes motion re vote changing name of Conference. . . . .	78
Member, Committee on Activities in Public Health Matters by Federal Departments other than the U. S. Public Health Service. . . . .	136
U. S. Army:	
Resolutions coördinating state boards and departments of health with the office of the Surgeon-General of the U. S. Army. . . . .	73, 107
U. S. Public Health Service; Program against venereal disease. . . . .	93
Amended resolution concerning Public Health Service. . . . .	108
Sanitary policy. . . . .	113
Venereal Diseases. . . . .	11, 89
Description of Practical Organization and Carrying Out of an Efficient State Department of Health Program against. . . . .	96
Kahn-Chamberlain bill. . . . .	102
Program of U. S. Public Health Service against. . . . .	93
Program of War Department against. . . . .	89
Vision, Conservation of, Committee on. . . . .	12

	PAGE
War Department, Program against venereal disease.	89
War Program of National Tuberculosis Association.	71
War Tuberculosis Problem.	59
Welch, Dr. S. W.:	
Discusses sanitary policy under war conditions.	108, 114
Member, Auditing Committee.	12
Whittaker, Mr. H. A.:	
Chairman, Committee on Recent Advances in Sanitary Laws, Organization and Practice	136
Elected member of Executive Committee.	133
Reporting for Committee on Recent Advances in Sanitary Laws, Organization and Practice	18
Williams, Dr. E. G.:	
Discusses committee report on pneumonia.	53
Terminal disinfection	45
Member, Committee on Recent Advances in Sanitary Laws, Organization and Practice	136
Woodward, Dr. W. C.:	
Reporting for Committee on Publicity.	135
Young, Dr. Henry E.:	
Member, Committee on International Border Health Problems.	136
Member, Committee on Progress of Full-Time District Health Officer Legislation.	136







